Leveraging Data for the NPS Program

Tony Selle, EPA R8
Fred Suffian, EPA R3

National NPS Coordinators Meeting
Park City, UT
June 2006

INTRODUCTION

In this session we will try to accomplish:

- A Very brief introduction to 5 EPA database systems that may be useful for NPS
- Provide additional database info/links for those looking to know more
- Provide examples of multi-database integration
- Facilitate a discussion on approaches for integration
- Help identify NPS needs for data integration

Session Agenda

- Intro and Purpose   Tony
- GRTS overview   Fred
- STORET/WQX overview   Tony
- NTTS overview   Fred
- ADB/NAD overview   Tony
- WATERS overview   Tony
- Discussion – leveraging these and other data for use in NPS, what is needed, what integration is already being done, what have states/regions done to integrate.

GRTS – Grants Reporting and Tracking System

Fred Suffian EPA Region 3
Nonpoint Source Program Manager

National Nonpoint Source Coordinator's Meeting

Park City, Utah June 2006

Here's the Initial Screen for a Project

Nonpoint Source System - GRTS

Search | Help | Logout (PAUPDATE)

Project - Project Information - General Information

Grant #:	003498030	Region:	03	State:	PA
Project Number:	01	Award Fiscal Year:	2003	State Project Number:	2301
Project Title:	WPCAMR Conservation District Mining Program				

Project Information | Categories & Codes | Contractors | Drainages | Evaluations | Tasks

GENERAL INFORMATION | SCHEDULING | STATUS | BUDGET | DESCRIPTION | ATTACHMENTS | RELATED WEBSITES

[Save]

* Project Title: WPCAMR Conservation District Mining Program

Project Manager: joe smith ▼   Not Found? Create New   Phone: 215-123-4567

State Project Manager: ▼   Not Found? Create New   Phone:

Load Reduction Area Model: ▼

Each of the major tabs [e. Project Information] has tabs under it

Here we are tabbed into Categories and Codes under the Second Order Tab Functional Categories

Nonpoint Source System - GRTS

EPA Home > GRTS Home > State Records > 003498030 > Project 01 > **Functional Categories**   Search | Help | Logout (PAUPDATE)

Project - Categories & Codes - Functional Category

Grant #:	003498030	Region:	03	State:	PA
Project Number:	01	Award Fiscal Year:	2003	State Project Number:	2301
Project Title:	WPCAMR Conservation District Mining Program				

Project Information | **Categories & Codes** | **Contractors** | **Drainages** | **Evaluations** | **Tasks**

FUNCTIONAL CATEGORIES | POLLUTION CATEGORIES | WATERBODIES | ECOREGIONS | COUNTIES | USGS HUC / WATERSHEDS | STATE HUC

[Delete Selected] [New] [Make Selected Primary]

		Functional Category	Primary	Inserted By	Inserted Date
☐	[Edit]	Statewide Education/Information Programs	Y	MIGRATION	04/12/2006
☐	[Edit]	BMP Design/Implementation	N	PAUPDATE	05/19/2006
☐	[Edit]	Technical Assistance to State/Local	N	MIGRATION	04/12/2006

1 - 3

[Delete Selected] [New] [Make Selected Primary]

Comments | EPA Internet | EPA Search

. . . Provides access to Drainage Area Pollutants

Nonpoint Source System - GRTS

EPA Home > GRTS Home > State Records > 003498030 > Project 14 > **Drainage Area Pollutants**

Project - Environmental Results - Drainage Area Pollutants

Grant #:	003498030	Region:	03	State:	
Project Number:	14	Award Fiscal Year:	2003	State Project Nu	
Project Title:	Site 15 AMD Passive Treatment				

Project Information	Categories & Codes	Contractors/Subgrantees	**Environmental Results**	Ev

LOAD REDUCTION	DRAINAGE AREAS	DRAINAGE AREA POLLUTANTS	BEST MANAGEMENT PRACTICES	DRAINAGE MAPS

Choose a Drainage Area: [3-North Branch Kettle Creek ▾]

Delete Selected **New**

☐		Pollutant Type	Current Year Estimate	Units	Round	Cumulative Estimate	Units	TMDL
☐	[Edit]	pH	5	N/A	-	-	N/A	Y
☐	[Edit]	Metals (Iron)	1000	LBS/YR	-	-	LBS/YR	Y
☐	[Edit]	Metals (Aluminum)	50	LBS/YR	-	-	LBS/YR	Y

ER- Drainage Maps Tab accommodates Lat-Lon Anchor Points

Project - Environmental Results - Drainage Area Maps

Grant #:	003498030	Region:	03	State:
Project Number:	14	Award Fiscal Year:	2003	State Project
Project Title:	Site 15 AMD Passive Treatment			

Project Information | **Categories & Codes** | **Contractors/Subgrantees** | **Environmental Results**

LOAD REDUCTION | DRAINAGE AREAS | DRAINAGE AREA POLLUTANTS | BEST MANAGEMENT PRACTICES | DRAINAGE MAPS
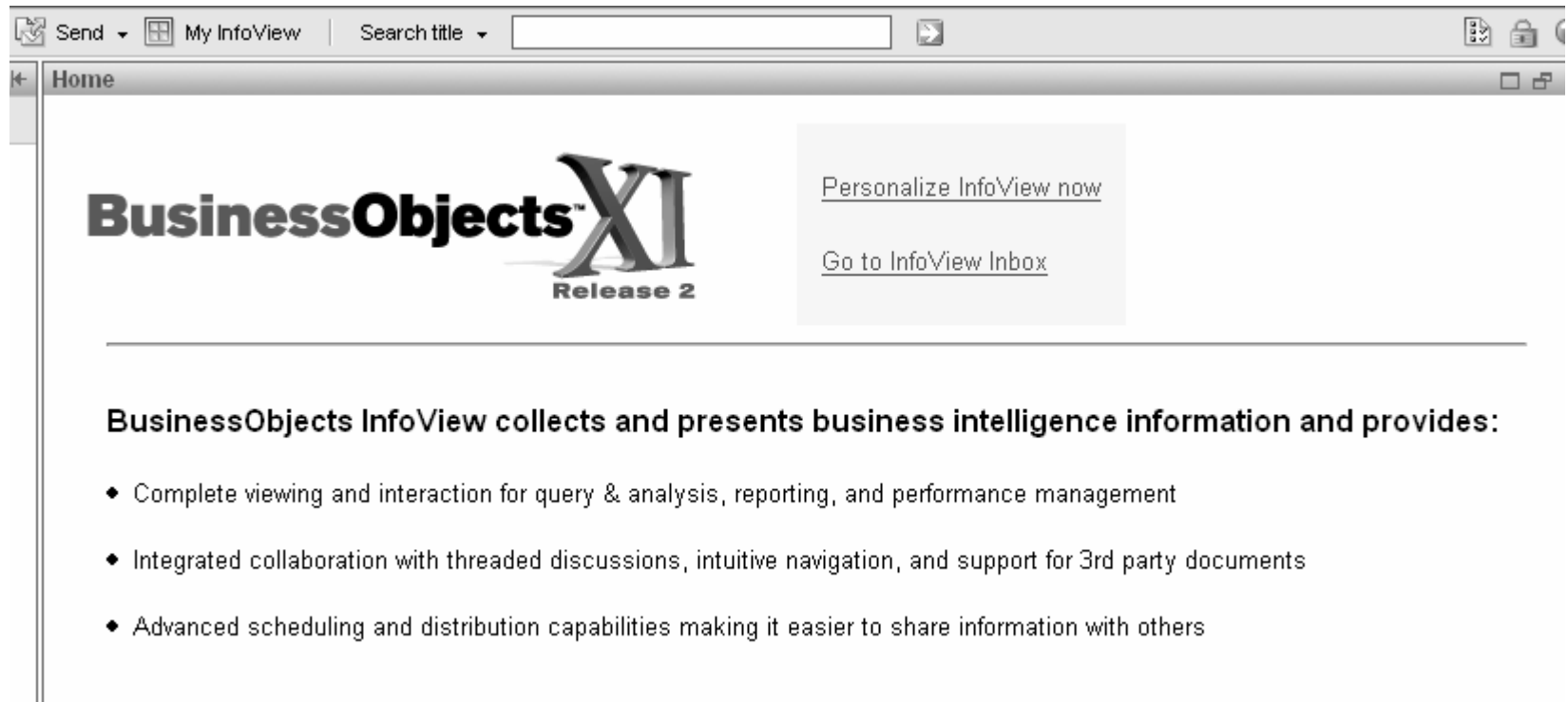
Choose a Drainage Area: 3-North Branch Kettle Creek

Delete Selected | **New**

		Stream Name	STARTING POINT (Latitude, Longitude)	ENDING POINT (Latitude, Longitude)	Inserted
☐	[Edit]	Victory Branch	(41.25, -77.485)	(41.265, -77.502)	PAUPD
☐	[Edit]	beaverdam run	(41.275, -77.5)	(41.304, -77.76)	PAUPD

Report creation will be facilitated through the use of Business Objects.

Send ▼ | ⊞ My InfoView | Search title ▼ [   ] ➦

Home

**BusinessObjects XI**
Release 2

Personalize InfoView now

Go to InfoView Inbox

BusinessObjects InfoView collects and presents business intelligence information and provides:

- Complete viewing and interaction for query & analysis, reporting, and performance management

- Integrated collaboration with threaded discussions, intuitive navigation, and support for 3rd party documents

- Advanced scheduling and distribution capabilities making it easier to share information with others

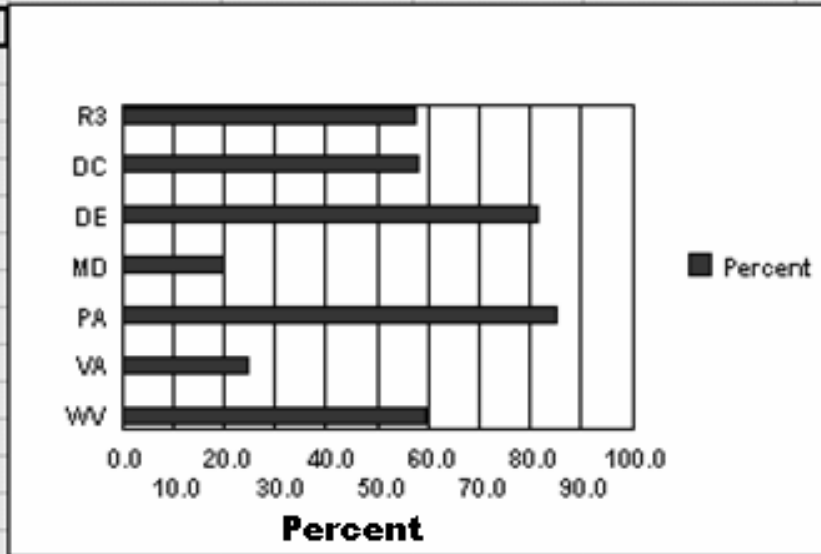# Percent of Active Projects with Current Evaluations

State	% with Current Evaluations
DC	86.4
DE	72.7
MD	8.8
PA	88.4
VA	53.1
WV	68.6
REGION	61.2
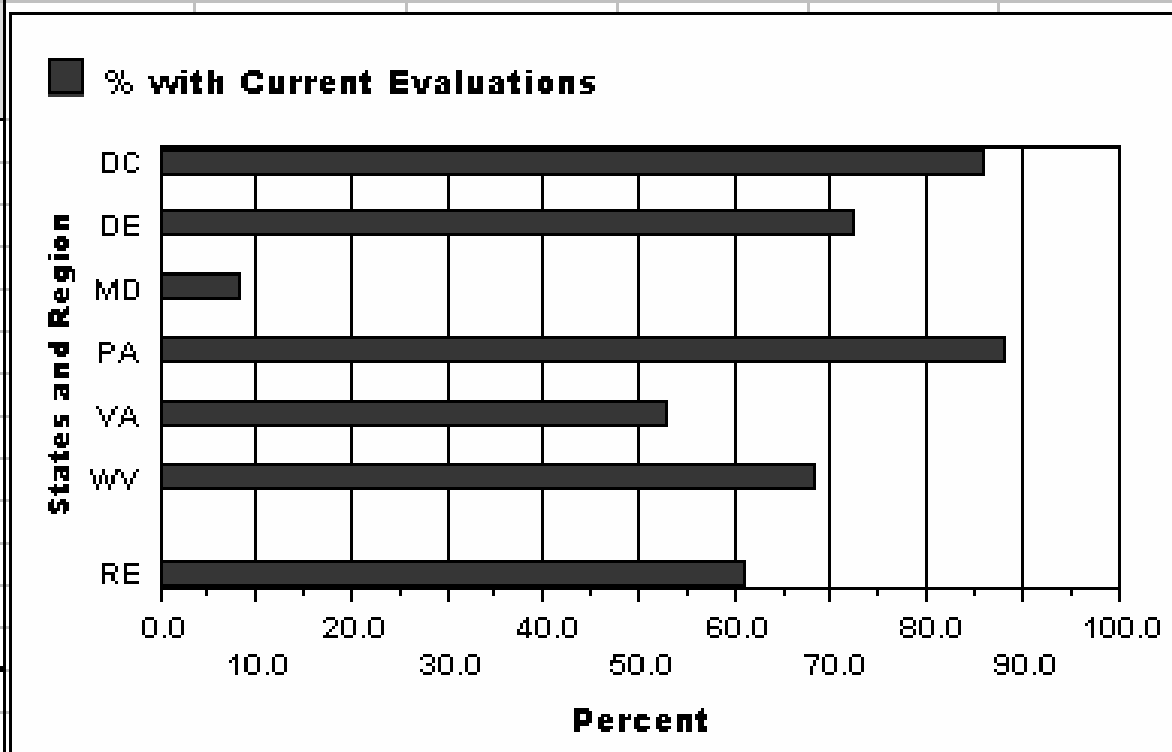
**Percent of Incrementally Funded Projects
which have BMPs (expressed in $$$s)**

State	Percent	Rank
R3	58.1	---
DC	58.4	4
DE	82.0	2
MD	20.6	6
PA	85.6	1
VA	25.3	5
WV	60.3	3

In accordance with <u>Guidelines for the Award of Section 319 Nonpoint Source Grants to States and Territories in FY 2002 and Subsequent Years,</u> States must use 80% of their "incremental" funds for implementation and may use up to 20% to develop watershed-based plans.

Using that '80%' as a benchmark, one would expect that about 80% of the incremental funds should be supporting implementation projects with BMPs. The Region 3 data currently shows about 58%.
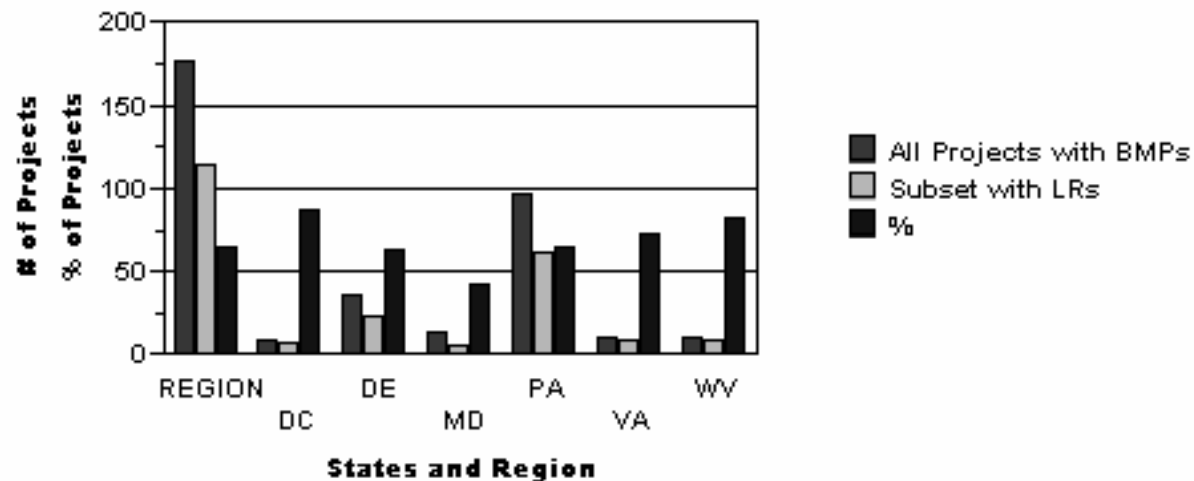
Total Projects with BMPs and with Load Reductions [LRs]
FY2002-2005 Grants
Data drawn February 16, 2006

	1	2	3=2/1	
	All Projects with BMPs	Subset with LRs	%	Rank
REGION	176	115	65.3	
DC	8	7	87.5	1
DE	36	23	63.9	5
MD	14	6	42.9	6
PA	96	62	64.6	4
VA	11	8	72.7	3
WV	11	9	81.8	2

All Projects with BMPs and Subset with Load Reductionss

Total Projects with Load Reductions and WebRIT Tags
FY2002-2004 Projects
Data drawn February 16, 2006

	1	2	3=2/1	
Entity	All Projects with LRs	Projects with WebRIT Tags	%	Rank
REGION	137	94	68.6	
DC	9	3	33.3	5
DE	20	10	50.0	4
MD	15	8	53.3	3
PA	68	67	98.5	1
VA	14	0	0.0	6
WV	11	6	54.5	2

**All Projects with Load Reductions and Projects with WebRIT Tags**
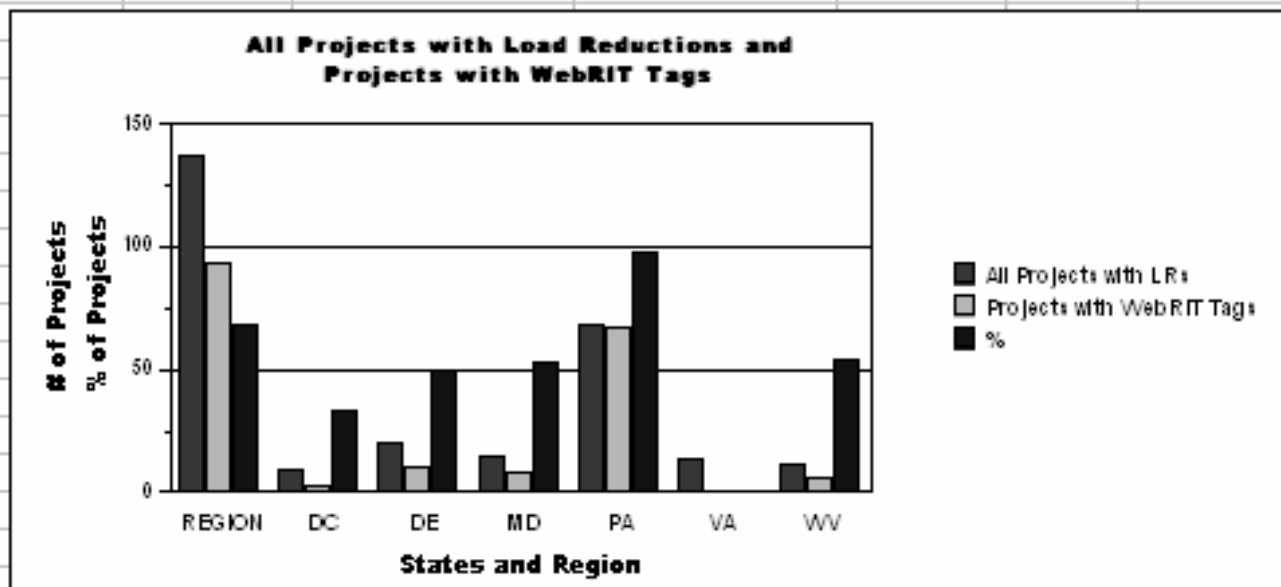
State Rankings by Percent of Expenditures Of Awarded Funds

State Rankings

April 1, 2006

STATE	AMOUNT AWARDED	DRAWDOWN TO DATE	% OF MONEY SPENT	RANK
A	C	D	E	
DC	5,585,900	3,980,594	71.26	2
DE	6,489,000	5,221,914	80.47	1
MD	12,207,638	6,984,200	57.21	5
PA	26,340,300	16,051,621	60.94	4
VA	17,637,500	9,596,679	54.41	6
WV	12,567,028	8,914,923	70.94	3
REGION	80,827,366	50,749,931	62.79	

X STATE	Y % OF MONEY SPENT
DC	71.26
DE	80.47
MD	57.21
PA	60.94
VA	54.41
WV	70.94
REGION	62.79

State Rankings
% of Awards Spent
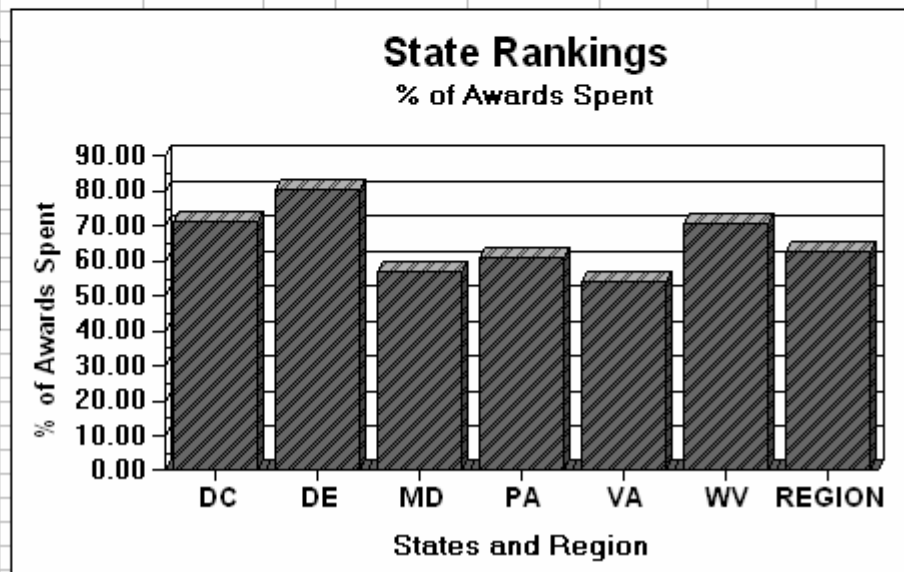
Data drawn from EPA Records on April 1, 2006

	FY2002-2005 Total Projects, Completed and Accepted Projects						
	Data drawn on April 1, 2006						
STATES	% Projects Accepted	Rank					
DC	100.0	1					
DE	29.4	6					
MD	48.7	5					
PA	79.7	4					
VA	88.2	3					
WV	88.9	2					
REGION	71.1						

Projects Completed and Accepted by EPA
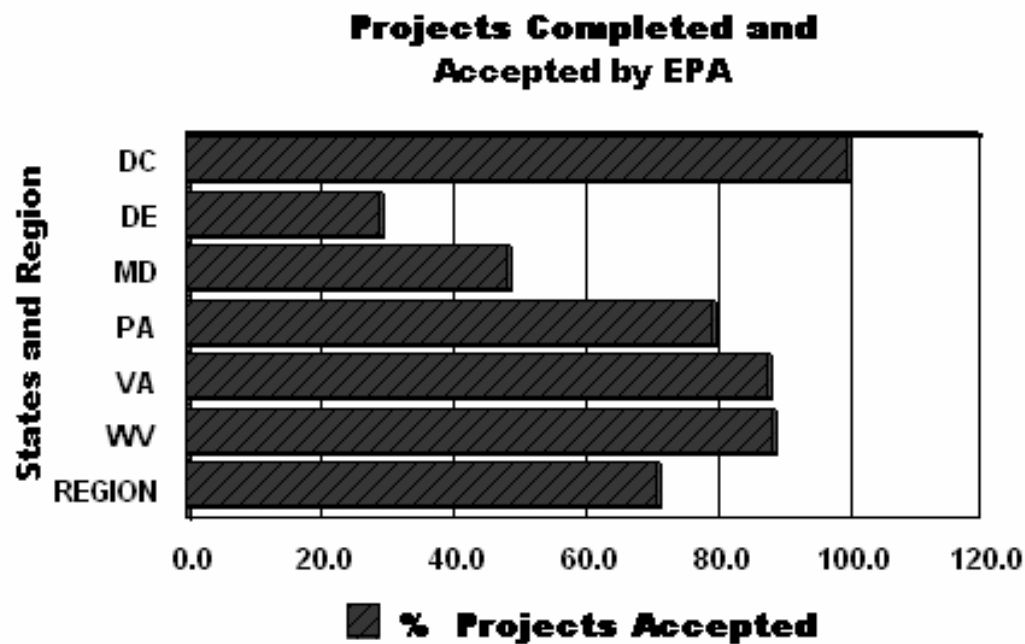
National NPS Program Indicators
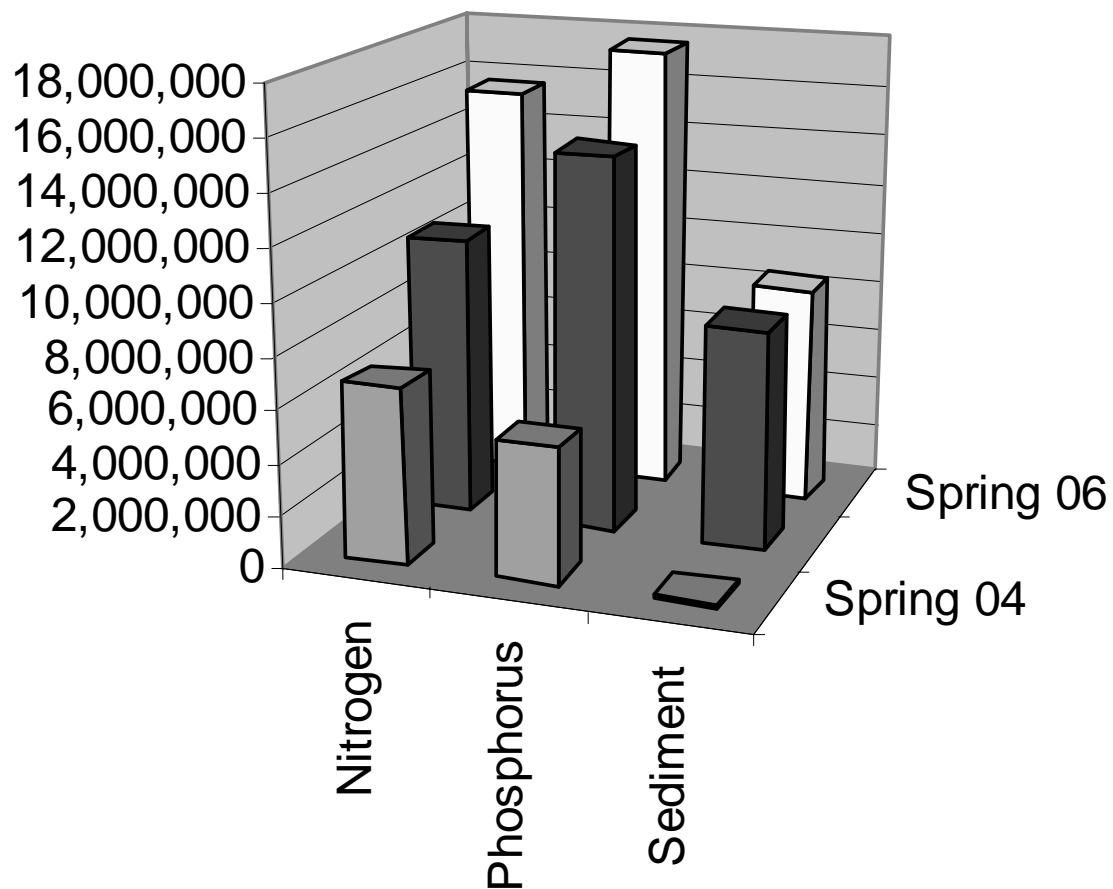
"Current year" data field from GRTS

Regional Environmental Indicators

800,000		
600,000		
400,000		
200,000		
0		Spring 06
		Spring 05

Aluminum   Iron   Manganese
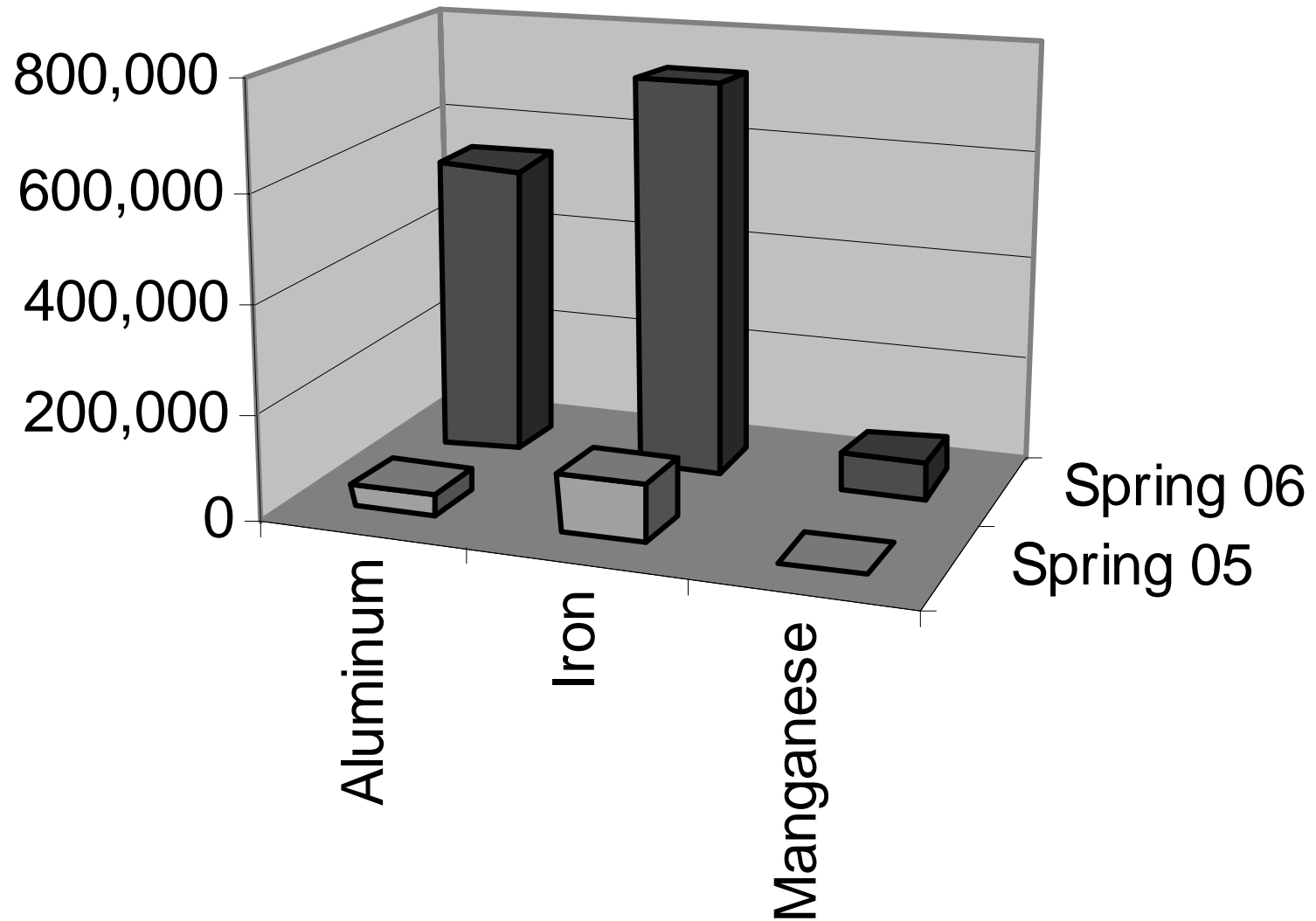
Regional Environmental Indicators
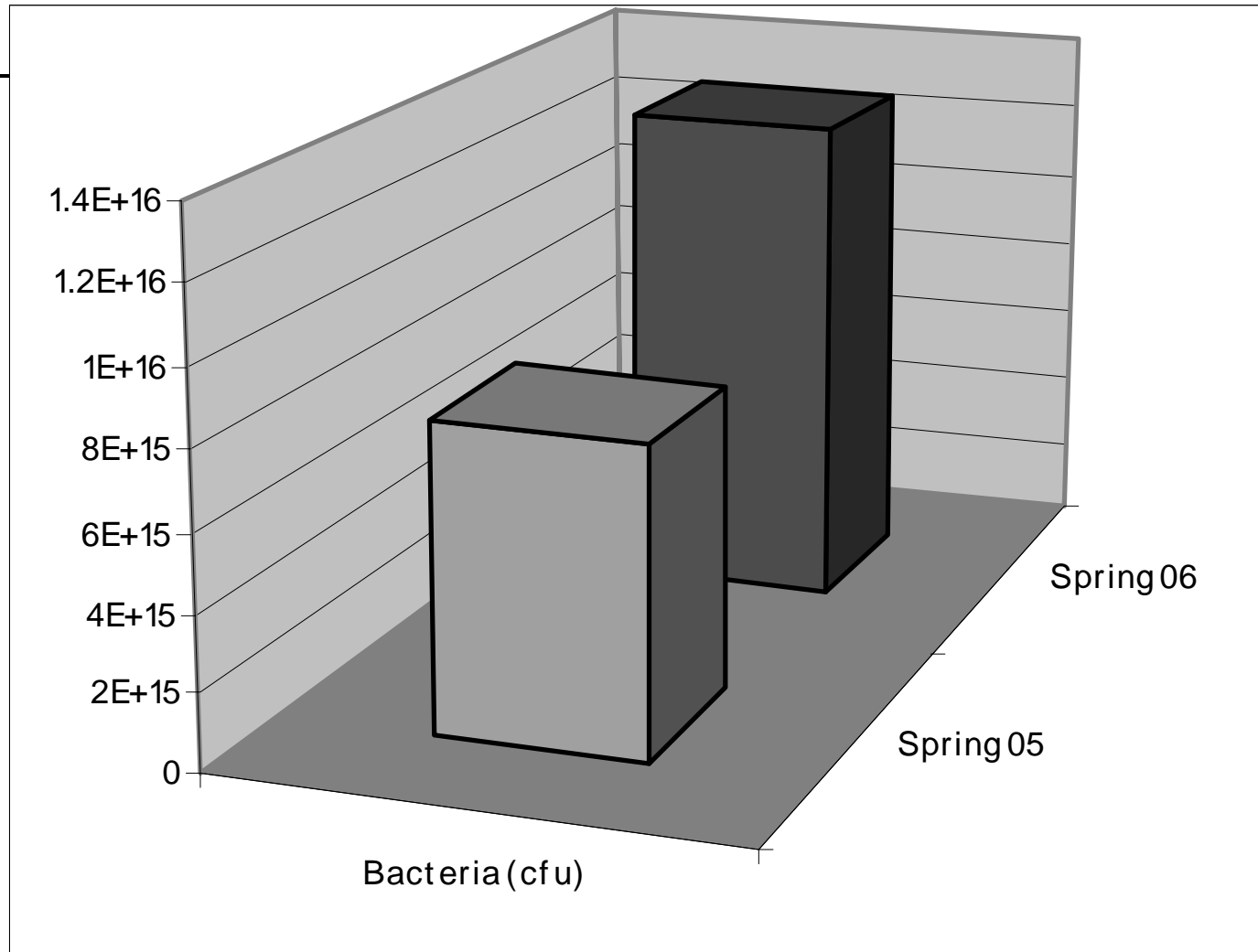
That's All Folks

ADB – NAD
Assessment Database and National Assessment Database

ADB/NAD – Platform

- ADB (Assessment Database) is a MS Access or Oracle application for States to organize and report their WQ assessments.
- NAD (National Assessment Database) is a Web-Based Oracle application for State submitted ADB roll-ups to a National System.
- Primarily used for Monitoring (305b/303d) and TMDL

ADB/NAD - Purpose

- Document and track assessment information for 305b/303d reporting or for Integrated Report

- Support the EPA Strategic Plan performance measures

ADB/NAD
Strengths and Weaknesses

Strengths

- Does clearly identify and document assessment decisions (305b, 303d)
- Does support key data elements for IR

Weaknesses

- Does Not track TMDL information (NTTS does this now...integration planned for this year)
- Does Not support CDX transactions (building now...ready for 2008 IR cycle)
- As of today, does not link to other water database systems

File   Edit   View   Favorites   Tools   Help

Back | Search   Favorites

Address   http://www.epa.gov/waters/305b/ | Go   Links

About WATERS
  Overview
  Geography
  Architecture
Tools
Data
Documents
Reporting

2002 National Assessment Database

The **2002 National Assessment Database** summarizes electronic information submitted by the states to EPA in the 2002 water quality reporting cycle. This information should not be used to compare water quality conditions between states or to identify statewide or national trends because of differences in state assessment methods and changes to EPA guidance. This represents the most recent electronically available state water quality information. We are currently assembling information for the 2004 reporting cycle.

This website is EPA's first-ever interactive summary of state-reported water quality information and allows the user to view assessments of individual waterbodies. It presents data in a format designed for quick reference by water quality professionals and those familiar with water quality reporting. EPA is working with the states to improve future electronic reporting.

Choose a state or territory from the map or pick list below to view its Water Quality Assessment Data. To view state data using an interactive mapping tool that displays a wide range of environmental information, go to EnviroMapper for Water.

[Alabama ▼] [GO]

NOTE: States and territories that are colored "gray" do not have electronic reports available at this time.

National Assessment Database
About this Database
Assessing Water Quality (Questions and Answers)
The 2002 National Assessment Database (Fact Sheet)
Previous National Water Quality Reports
EnviroMapper for Water

http://www.epa.gov/waters/305b/

Trusted sites

start   Tony Selle - Inbox - L...   2 Microsoft Office P...   2002 National Assess...   10:04 AM

U.S. Environmental Protection Agency

National Assessment Database

Recent Additions | Contact Us | Search: [   ] GO

EPA Home > Water > WATERS > National Assessment Database > Colorado State Assessment Report

Assessment Data for the State of Colorado Year 2002

- Total Assessed Waters of Colorado
- Assessed Waters of Colorado by Watershed
- Water Quality by Waterbody Type
  - Rivers, Streams, and Creeks
    - Individual Use Support for Assessed Waters
    - Overall Water Quality Attainment for Assessed Waters
    - Top State Causes of Impairments
    - Top State Probable Sources of Impairments
  - Lakes, Ponds, and Reservoirs
    - Individual Use Support for Assessed Waters
    - Overall Water Quality Attainment for Assessed Waters
    - Top State Causes of Impairments
    - Top State Probable Sources of Impairments

- Causes of Impairment
- Probable Sources Contributing to Impairment
- Glossary

National Assessment Database
About this Database
Assessing Water Quality (Questions and Answers)
The 2002 National Assessment Database (Fact Sheet)
Previous National Water Quality Reports

State of Colorado websites: EXIT Disclaimer State 305(b) Water Quality Assessment Report(s)

State Water Quality Program

Applet com.objectplanet.chart.PieChartApplet started   Trusted sites

start   Tony Selle - Inbox - L...   2 Microsoft Office P...   Environmental Protec...   11:40 AM

STORET and WQX

STORET - Purpose

- To manage analytic sampling event information and analytic sample results

- To allow for long-term archive and re-use of data by all

- To provide a central point of access for analytical data

The Future of STORET

➤To keep pace with developing technologies and Agency wide data management strategies, EPA will be making significant changes to the STORET model of sharing data.

➤In the past, EPA has distributed the STORET database and a suite of data entry and retrieval tools to our partners, and use of the database has been the sole means to share data with the Agency.

➤Over the next 3 years, EPA will phase out this approach.

➤Through this transition period, EPA will continue to support both approaches for sharing data with EPA.

➤At the end of the transition period, STORET as presently implemented will no longer be supported.

➤EPA is committed to working with our data partners through this transition.

What is WQX?

➢WQX is a future production water quality data flow that will facilitate water quality data submission and exchange between EPA and its data partners.

➢WQX consists of standard data formats for sharing data with EPA, a centralized national database, and enhancement of the existing STORET/WQX Data Warehouse, where information is accessed using the internet.

➢The WQX formats are a set of standard 'schema' using Extensible Markup Language (XML) to provide various classes of data. A schema is simply a defined group of data elements that is organized in a set structure. XML provides a format for transferring the structured data by including a tag on each data element that identifies what element is included. XML files are text documents that apply this tagging approach.

➢As a part of this new system for data sharing EPA will develop a number of tools and services to facilitate its use. This will include a tool for the generation of XML files, web submittals of data, and enhanced web services for data retrieval

For additional information:

Visit www.epa.gov/storet

or Call Martin McComb, 303-312-6963

National TMDL Tracking System Overview

System Overview

- Oracle Relational Database
  - Development, Intranet, and Internet instances at EPA
  - 303(d) Lists, TMDLs, Lawsuits, Sources
  - Over 100 Database Tables and Views
  - One day delay from Intranet to Internet
- Part of WATERS Database Instance and Website (National Hydrography Database, Reach Address Database, NTTS, NAD, WebRIT, and others)
- Internet URL: http://www.epa.gov/waters/
- Intranet URL: http://intranet.epa.gov/waters/

NTTS Components

- Web based data entry system
- Web based reports
  - National, Regional, State, and HUC standard reports
  - Expert Query
  - Enviromapper
  - AskWATERS (future home of GPRA)
  - TMDL and Lawsuit Document full text searching
- MS Access Data Entry and Reporting
  - Direct access to Oracle Tables and Views
  - Build your own Access Reports
  - Data entry access is limited to list information.

NTTS 303(d) List Data

- **Required Data**
  - Waterbodies (state list id, water body name)
  - Impairments (pollutants) that are impairing use
- **Not Required**
  - HUC, Waterbody Type (sometimes derived by Reach Indexing)
  - Sources (Causes) of Impairments
  - Impaired Uses

NTTS TMDL Data

- Required
  - Status, Approval date, Lead state
  - Pollutants addressed by TMDL and source type
  - At least one impaired water segment
  - PCS facilities addressed by point source pollutants
- Not Required
  - Load and Waste Load Allocations where appropriate
  - Actual TMDL and related document files in PDF or other format
  - TMDL development information (cost, review dates, etc.)

Standard Web Reports

- National, Regional, State, HUC
- Use of simple bar charts
- Point and Click Selection
- Drill-down capability
- Management Reports on Intranet
- Internet URL: http://www.epa.gov/waters/tmdl/
- Intranet URL: http://intranet.epa.gov/waters/tmdl/

Expert Query

- Ad hoc reporting tool
- Complex selection, sorting, and display criteria
- Simple statistics
- Built in links to Enviromapper and other external standard reports
- Exports to Excel, Lotus
- Database driven (database views, metadata) – easy to add more topics
- Popular
- URL Internet: http://www.epa.gov/waters/tmdl/expert_query.html
- URL Intranet (more data): http://intranet.epa.gov/waters/tmdl/expert_query.html

Enviromapper for Water

- OW's Mapping Tool
- Uses USGS/EPA National Hydrography Database (river/stream network)
- OW entities (303(d), 305(b), WQS, DWI, etc.) are reach-indexed to the NHD.
  - Lag time in reach indexing
- Zoom in from main page or directly map an entity.
- URL: http://www.epa.gov/waters/enviromapper/index.html

Ask WATERS

- Question Driven, Management and Analysis Reporting tool
  – Home for GPRA type queries
- Highlight capabilities and data of WATERS
  – Cross Program Spatial overlaps
  – Bar and Pie charts
  – Central OW data repository
  – Expanding on secondary use of WATERS data
- Production March 2005

TMDL Document Search

- Approved TMDL Documents and their appendices are uploaded to NTTS

- Documents are converted to PDFs

- Document text is indexed to allow for full-text searching

- URL: http://www.epa.gov/waters/tmdl/tmdl_document_search.html

WATERS

WATERS – Integration of Data

- Web-based GIS application

- Integrates multiple Office of Water databases via spatial index

- Uses National Hydro Dataset (NHD) as linear framework to address reaches and point features

    <u>WATERS databases and architecture</u>

The Architecture of WATERS

ut WATERS
Overview
Geography
Architecture
ls
a
uments
orting

Total WATERS

Web RIT

Ask WATERS

EnviroMapper for Water

Internet

WATERS - Watershed Assessment, Tracking & Environmental ResultS

NHD Reach Address Database (RAD)

NHD

impaired waters

assessed waters

designated uses

monitoring stations

outfall locations

fish consumption advisories

sewage NDZs

beach closures

nutrient stations

319 grant Projects

NHD Reach Indexing Tools

TMDL tracking

NAD

WQS

STORET

PCS

NLFWA

NHD Reach Indexing Tools

NDZ

BEACH Watch

Nutrient Criteria

GRTS

MAP FEATURES

DISPLAY LABEL ALL ACTIVE

☑ ☐ ○ Impaired Waters
☑ ☐ ○ Water Quality Standards
☑ ☐ ○ Assessed Waters
☑ ☐ ○ Beaches

WATERS
WATERS Tool that uses information from the RAD

NHD Reaches
NHD Reach Addressing Database (RAD)

Stream addresses stored in NHD RAD
OW program database

Trusted sites

About WATERS

Overview

Geography

Architecture

Tools

Data

Documents

Reporting

WATERS Tools

- **EnviroMapper for Water**
  EnviroMapper for Water is a web-based Geographic Information System (GIS) application that dynamically displays information about bodies of water in the United States. This interactive tool allows you to create customized maps that portray the nation's surface waters along with a collection of environmental data. Find out about the health of a river near where you live.

- **WATERS Services** - The WATERS services are database and web based services providing user application friendly interfaces to complex analyses. These services make extensive use of the NHD and indexed program data in the RAD, and also integrate other WATERS program data in selected services. Designed as modular units, the services are being developed within a common architecture and each service will be available as it is completed.

- **Ask WATERS**
  NEW! PILOT VERSION 1.0 - Ask WATERS answers multi-program questions that draw on information from the databases linked through WATERS. This tool generates cross-program calculations, examines spatial relationships between programs, performs nationwide analyses, produces multi-program inventory reports for a given geographic area, and investigates interstate water quality issues.

- **WATERS Expert Query Tool**
  WATERS Expert Query Tool is a web-based application that allows you to create your own queries to display or extract data concerning impaired and assessed waters and associated, approved Total Maximum Daily Loads.

- **NHD Toolkit** EXIT Disclaimer - The NHD Toolkit is a collection of ArcView extensions provided to assist in the understanding and use of NHD data and in the development of NHD applications and tools.

  - **Reach Indexing Tool (RIT)** - Part of the NHD Toolkit, the National Hydrography Dataset Reach Indexing Tool (NHD-RIT) is an interactive GIS

WATERS Directory

What kind of **information** can I find out using WATERS?

Where can I **view** this information?

Where can I access the **data**?

How does WATERS help EPA Office of Water meet its mission **goals and needs**?

How does WATERS use **geography** to integrate OW program data?

What is the **design structure** of WATERS?

Status of Water Program Features (Linked to the NHD)
by State, Tribe and Territory

(Generated on 12-JUN-06)

ALL features are available　　SOME features are available　　NONE (No) features are available

Status of Water Program Features by **State**

State	Impaired Waters	Water Quality Standards	Assessed Waters	Beaches	Sewage No Discharge Zones	Nonpoint Source Projects
Alaska	NONE	NONE	NONE	NONE	NONE	NONE
Alabama	SOME	NONE	NONE	SOME	NONE	NONE
Arkansas	SOME	NONE	SOME	NONE	NONE	NONE
Arizona	SOME	ALL	SOME	NONE	NONE	SOME
California	SOME	NONE	SOME	SOME	SOME	NONE
Colorado	SOME	ALL	SOME	NONE	NONE	SOME
Connecticut	SOME	ALL	SOME	SOME	NONE	NONE
District of Columbia	SOME	ALL	SOME	NONE	NONE	SOME
Delaware	SOME	ALL	SOME	SOME	NONE	SOME
Florida	SOME	ALL	SOME	SOME	SOME	SOME

WATERS - Issues

- Spatial indexing of water program data is not easy and not fast

- Reporting cycles are different for databases, some every year, others less frequently

- Any changes to the indexing frame (NHD) causes changes to all feature indexing

Tony's Soapbox Issue #1

- Because of OMB agency enterprise architecture requirements and cost considerations, EPA seems to be shifting from supporting MANAGEMENT SYSTEMS to supporting REPORTING SYSTEMS.

- Shifts the burden of managing data to the States (more than before).

- Likely will contribute to poor data quality in National EPA systems.

Fred's Integration Project Slides

Putting it all together
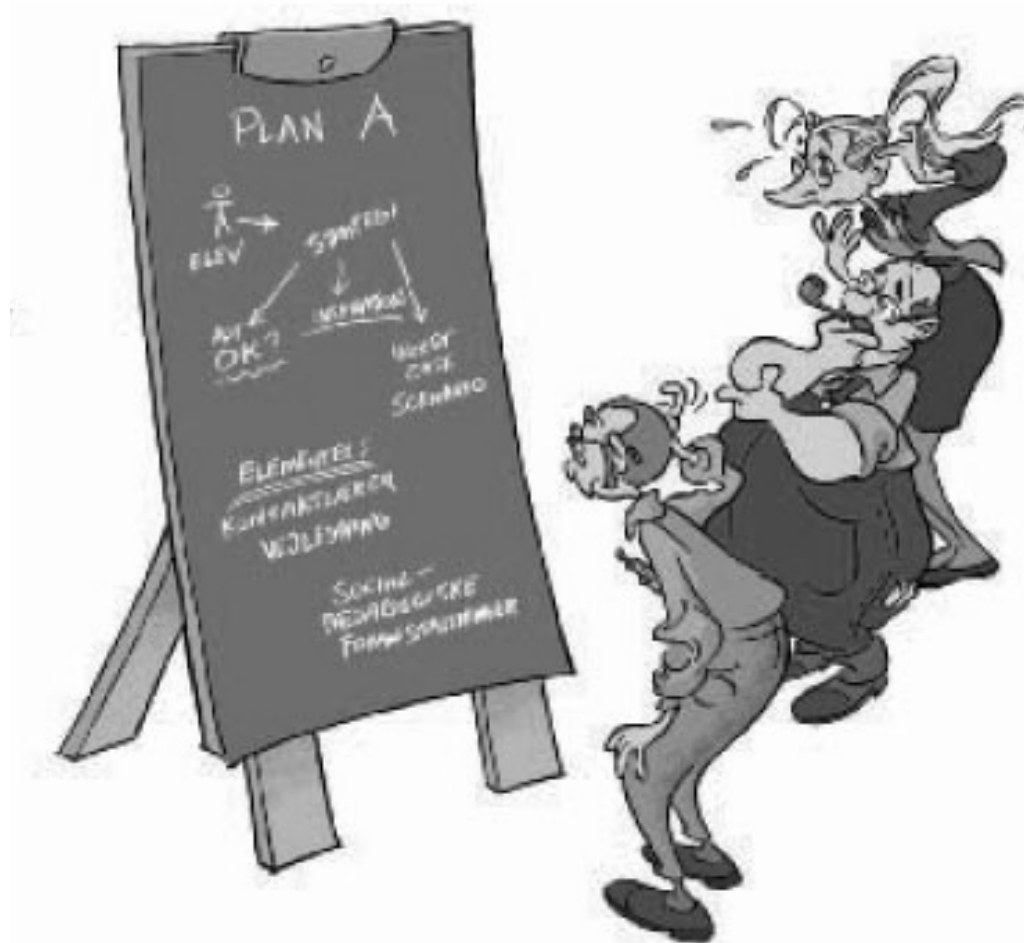
Region 3

Watershed Implementation Plan Regional Tracking System
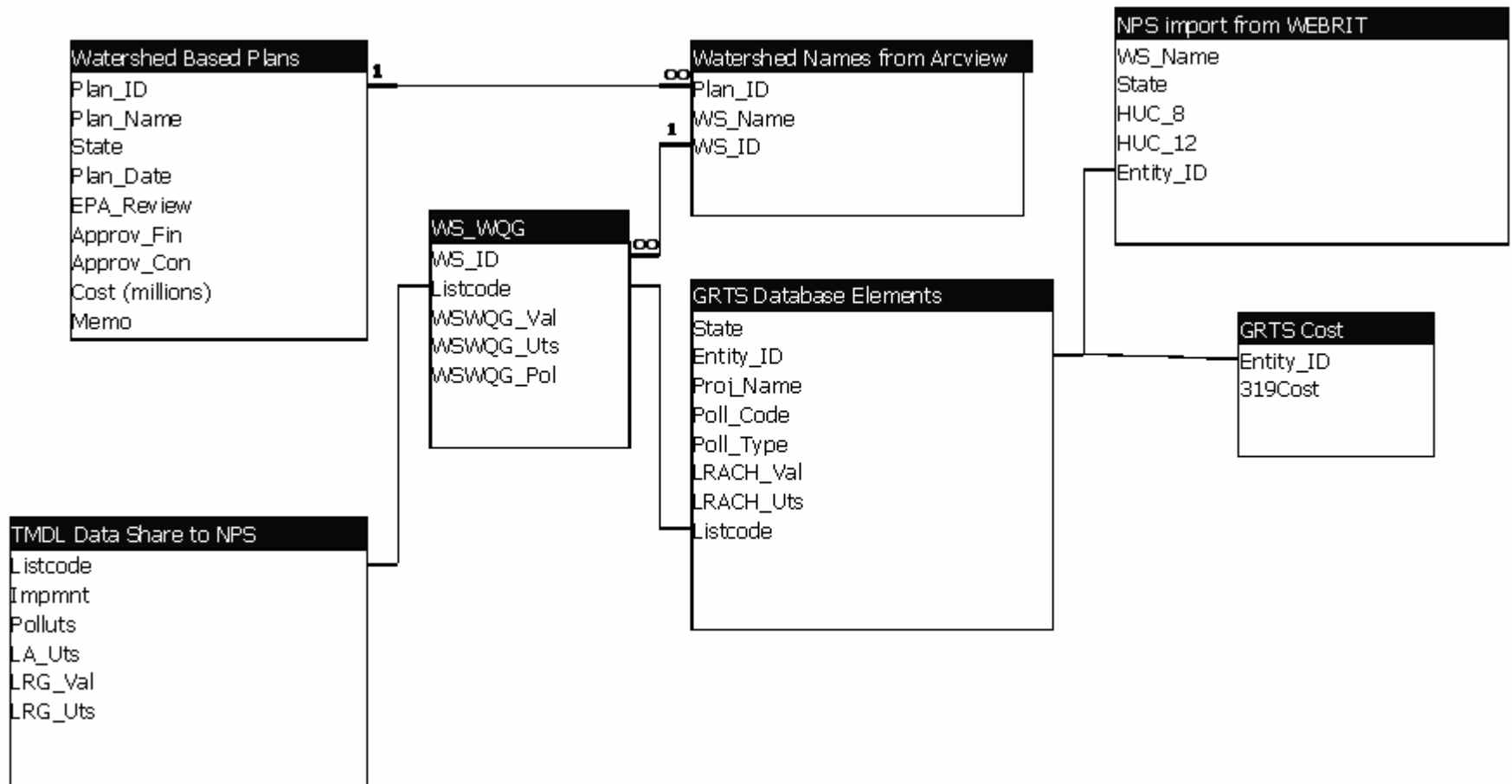
Watershed Based Plans Watersheds and Existing WEBRIT
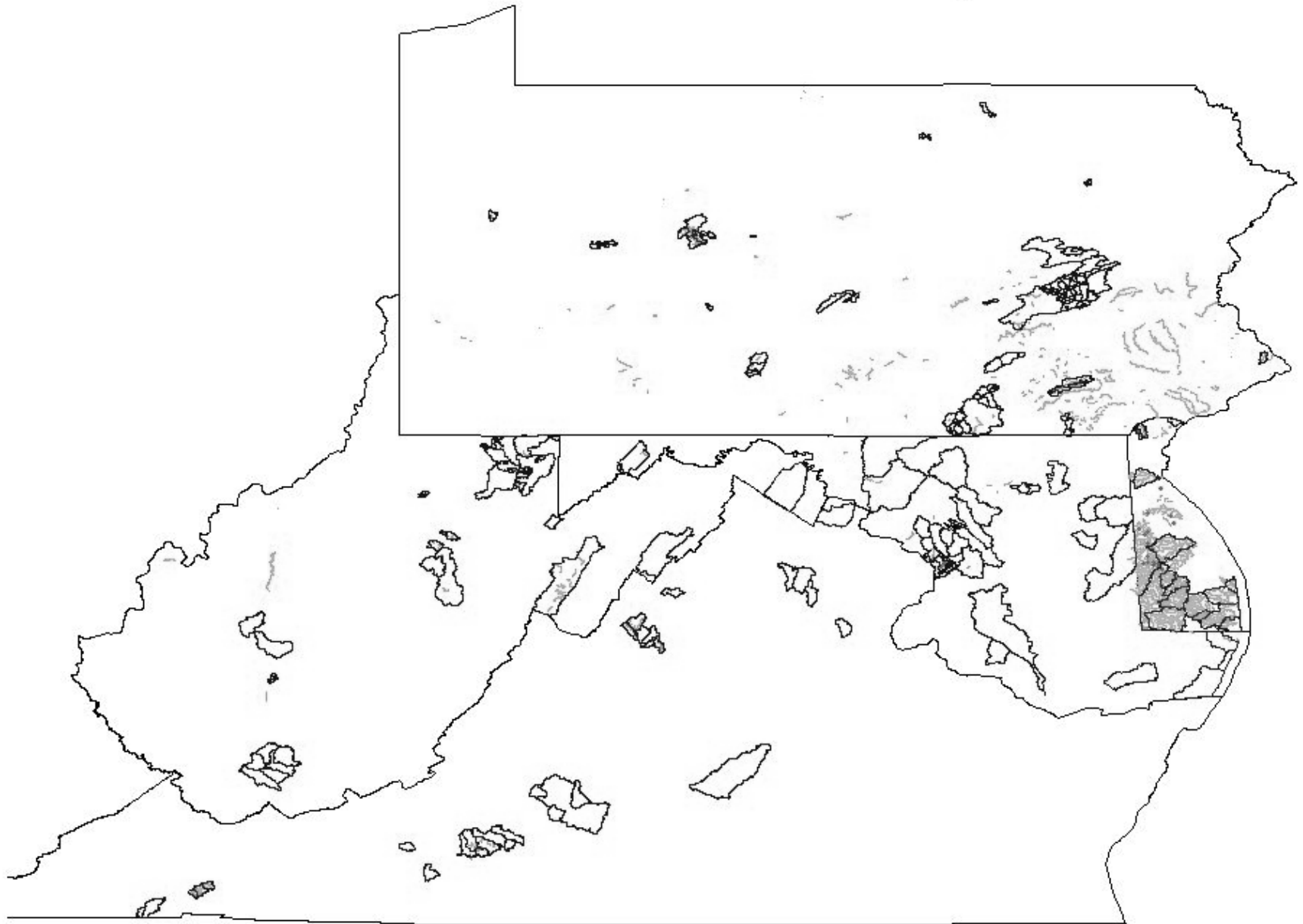
Waterbodies Targeted for Restoration
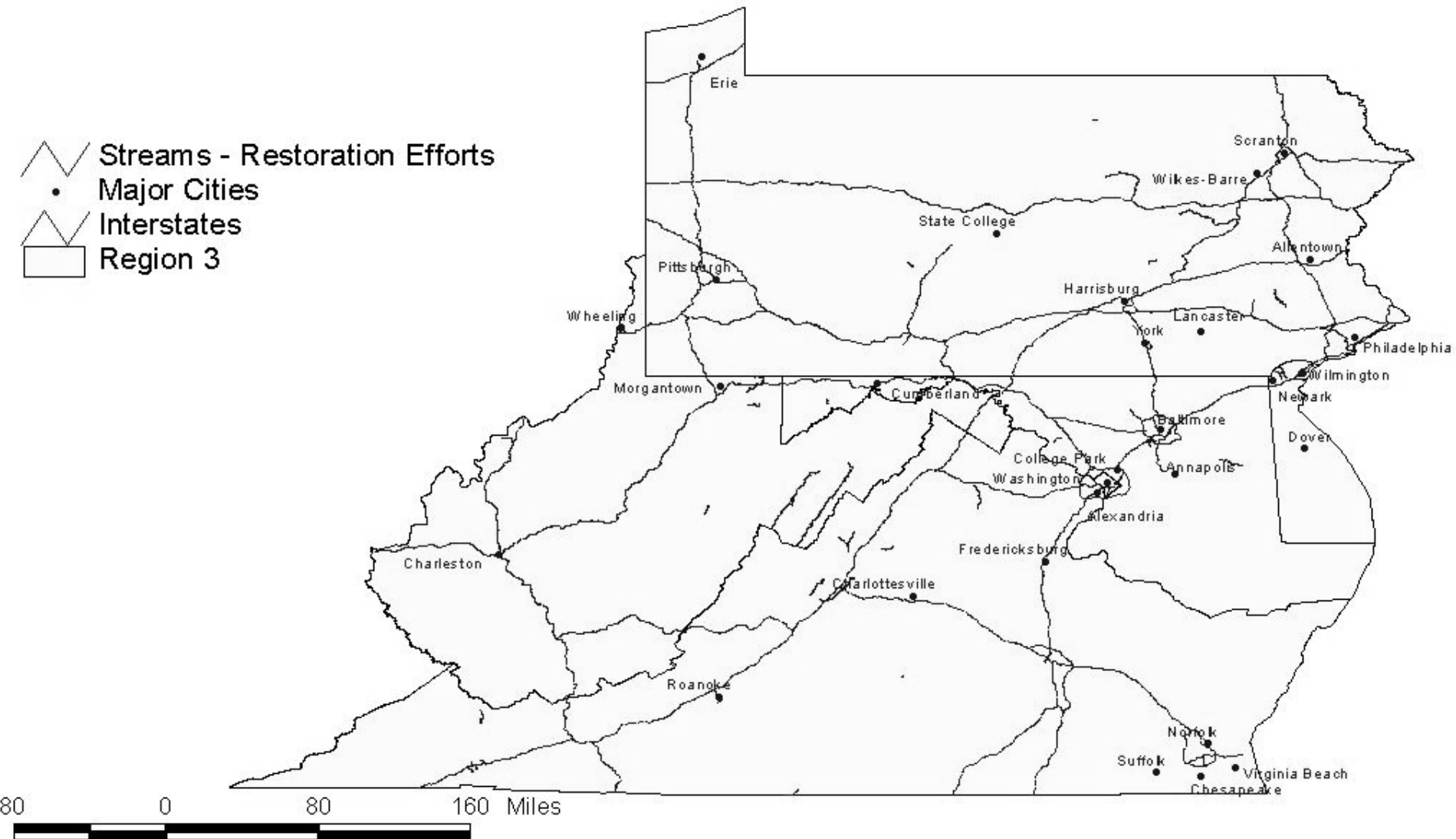
Waterbodies Targeted for Restoration and Watershed Plan Areas
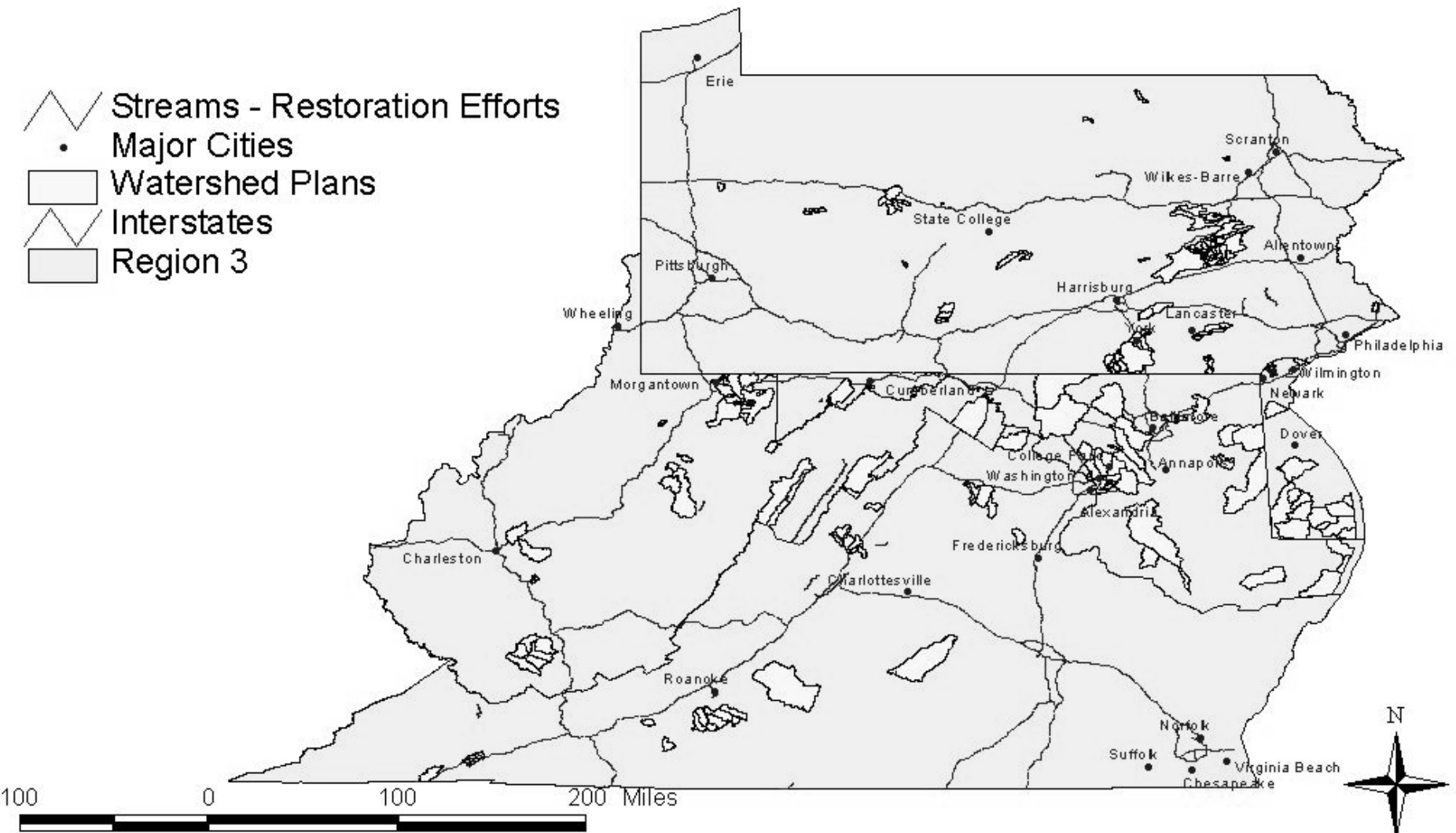
Waterbodies Targeted for Restoration & 12 digit Watershed Boundaries
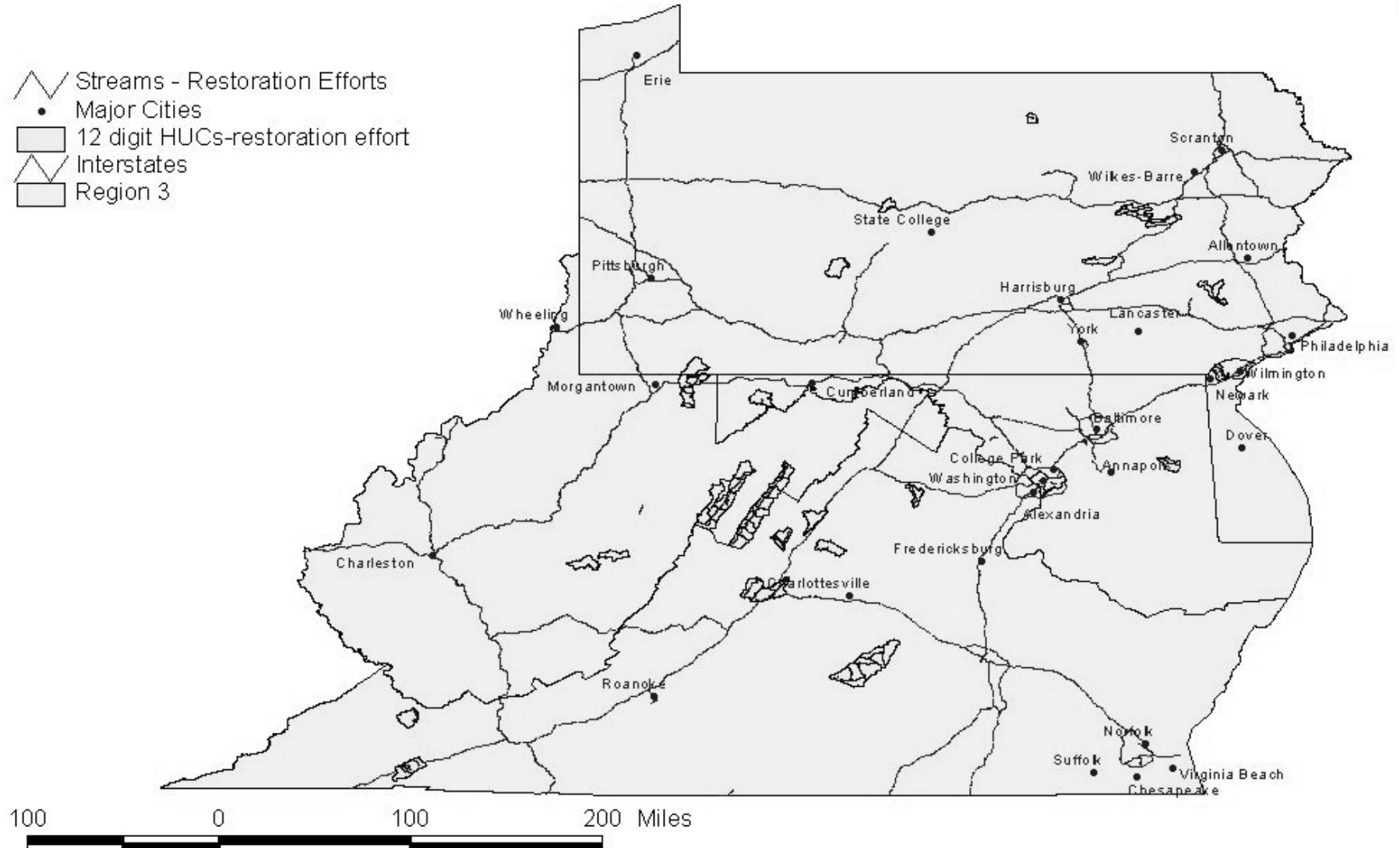
Watershed Plan
(Percentage of Goal Achieved)

Watershed Plans (percentage of goal achieved)

- ■ 1 - 25
- ▓ 25 - 50
- ▒ 50 - 75
- ☐ 75 - 100

EXAMPLE

100   0   100   200 Miles

N
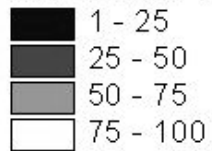
I'm the 'Decider' and I decided that this presentation is over.

Audience Participation

- How do you target 319 funding and projects to high priority waters?

- How do you integrate data from multiple programs and systems?

- Does all the monitoring data collected over time get used beyond its original purpose? Does it remain available?

- Is there a need to standardize on assessment and integration projects?

ADB-NAD Additional Overview Slides

ADB Version 2.0 Overview

A discussion of ADB concepts and what types of questions ADB can answer.

ADB Outputs Help Answer GPRA Strategic Measures
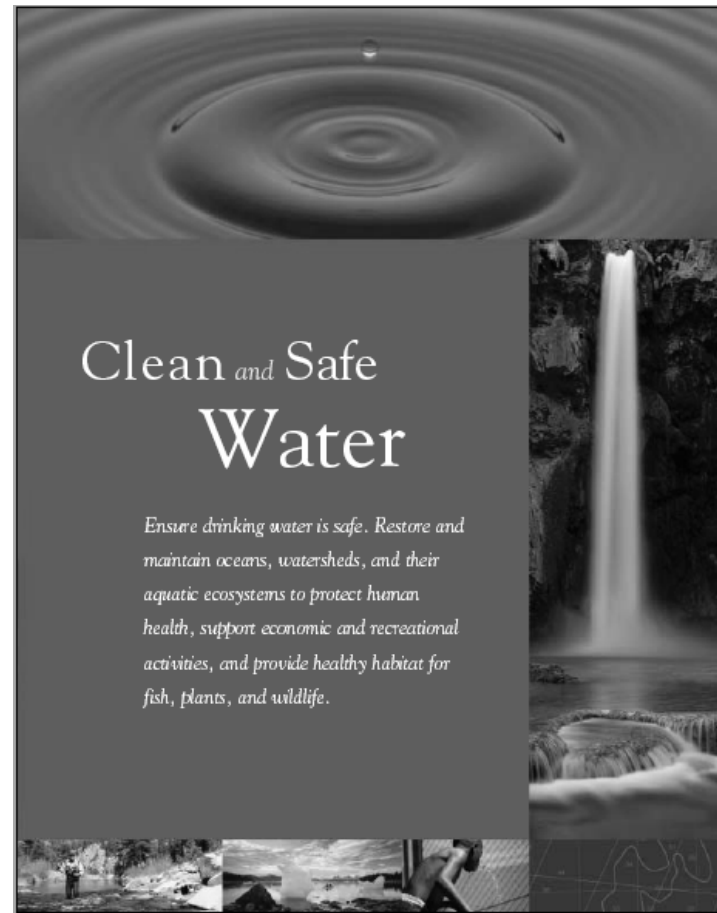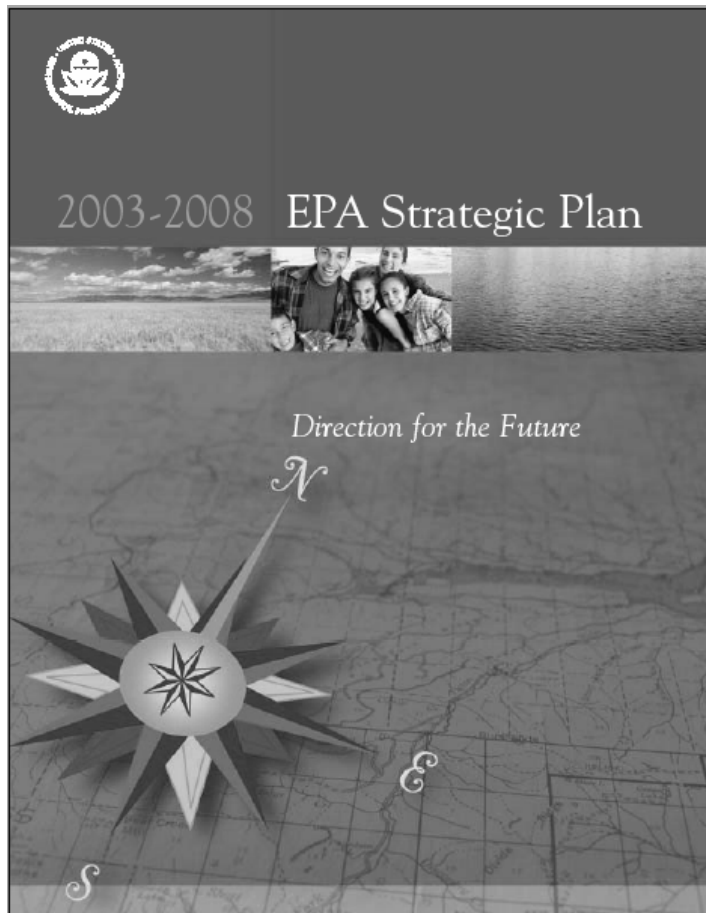
Specific Sub-Objectives that ADB can help answer

- **Subobjectives 2.1.3 and 2.2.1**

- **Strategic Targets**

- **Program Activity Measures (PAMs)**

Basic concepts from a Water Quality Standards Perspective

Waterbodies	Designated Uses	Criteria

Pri. Contact Rec.

Aquatic Life

Sec. Contact Rec.

Drinking Water

pH

Copper

Temperature
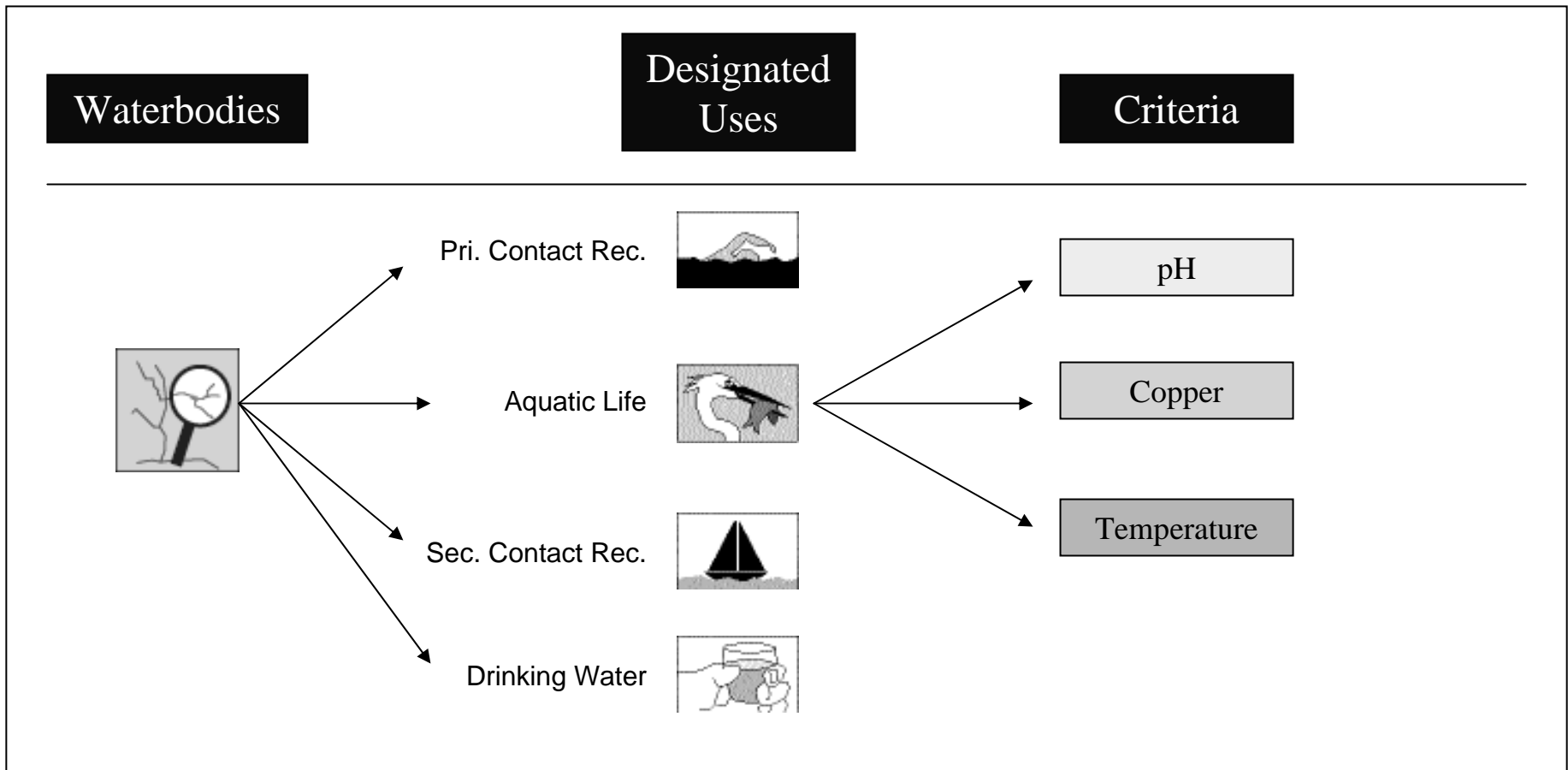
These same concepts are incorporated into the logic of the ADB

Assessment Units

 Assessment Units relate to WQS Waterbodies

ASSESSMENT UNITS

Select an Assessment Unit

By ID: NHRIV600031004-10 ▼

or by Name: [   ] ▼ GO

Limit list by: Category 5 ▼

Assessment Unit Functions

[Create New Assessment Unit]

[Update Current Assessment Unit]

[Delete Current Assessment Unit]

Information

Assessment Unit ID

NHRIV600031004-10

WATER TYPE	SIZE	UNIT
RIVER	0.21	MILES

[Add Type] [Delete Type]

Assessment Unit Name

Cain's Brook

Location Description

010600031004, Cain's Brook, Unknown Fishery

User Defined Category: [   ] ▼ [See Definition] **Trophic Status:** [   ] ▼

Designated Uses are assigned to Assessment Units

Assessment Units

Designated Uses

Pri. Contact Rec.

Aquatic Life

Sec. Contact Rec.

Drinking Water

Designated Uses are assessed

Designated Uses

Aquatic Life

Physical/Chemical Assessment Performed

Dissolved Oxygen and Temperature do not meet the criteria specified in the WQS

Assessment Conclusion: Segment is

NOT SUPPORTING this designated use.
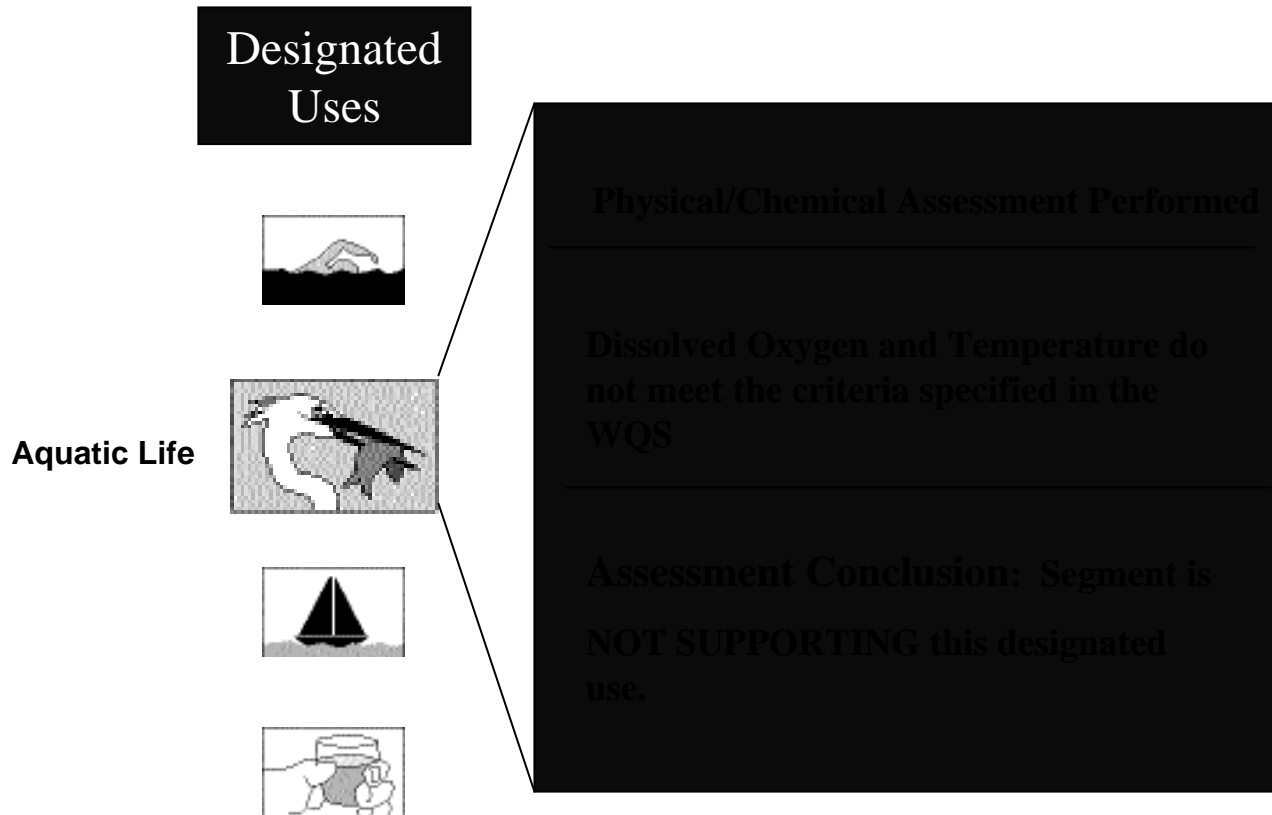
Use Attainment determined for each individual Designated Use

Uses	ID: NHRIV600031004-10			
	Name: Cain's Brook			
Assessed Uses	**Use Support**	**User Flag**	**Threatened?**	
Primary Contact Recreation	Fully Supporting			
Secondary Contact Recreation	Fully Supporting			
Aquatic Life	Not Supporting			
Drinking Water After Adequate Treatmen	Insufficient Information			

Change Use Support   Add Comment

Uses from OST WQS Database

When Uses are not supporting, Causes of Impairments are assigned
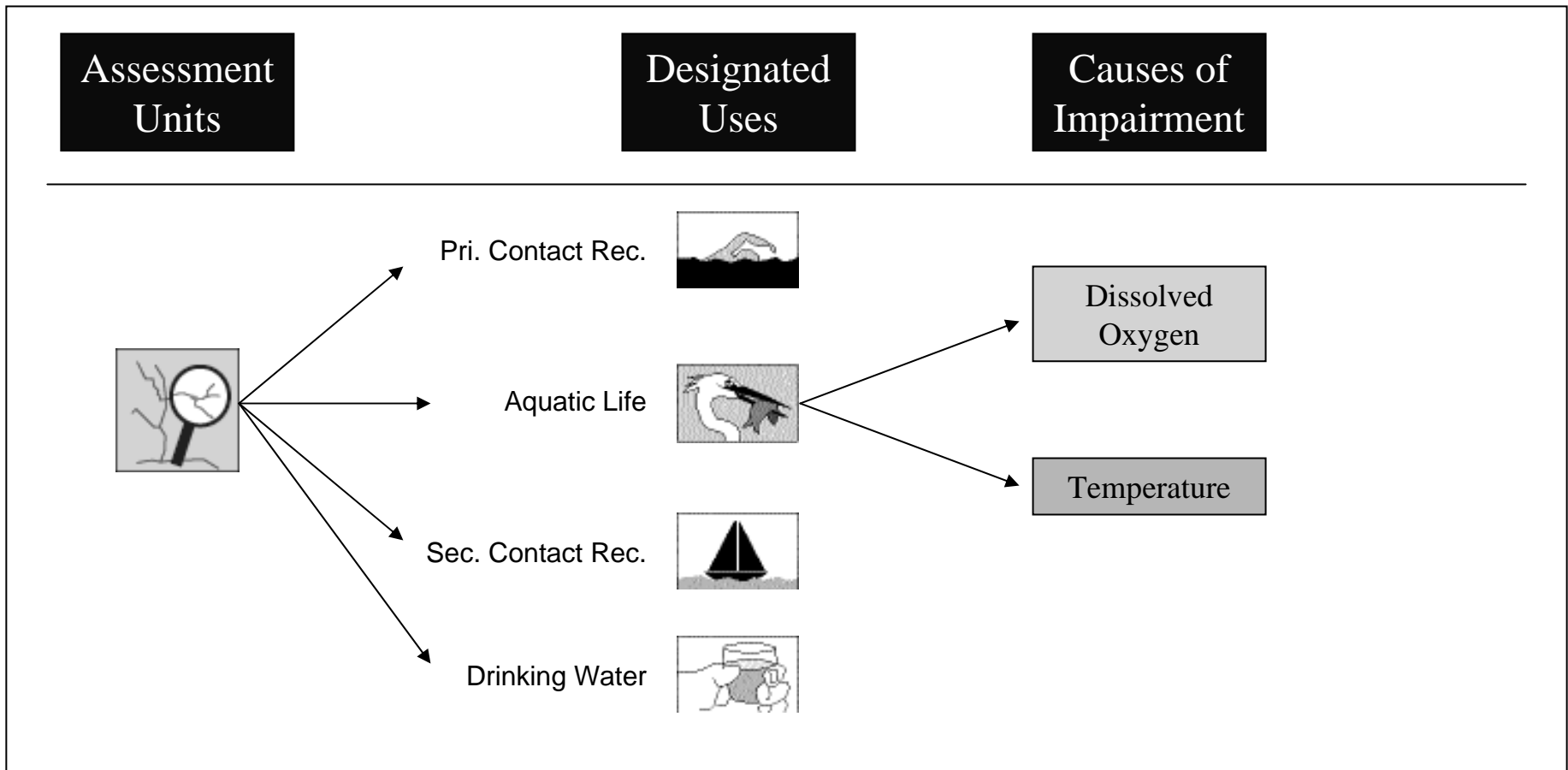
Use Impairments (Causes) – List Largely Based on STORET

For Impairments (causes) identified, Sources are assigned
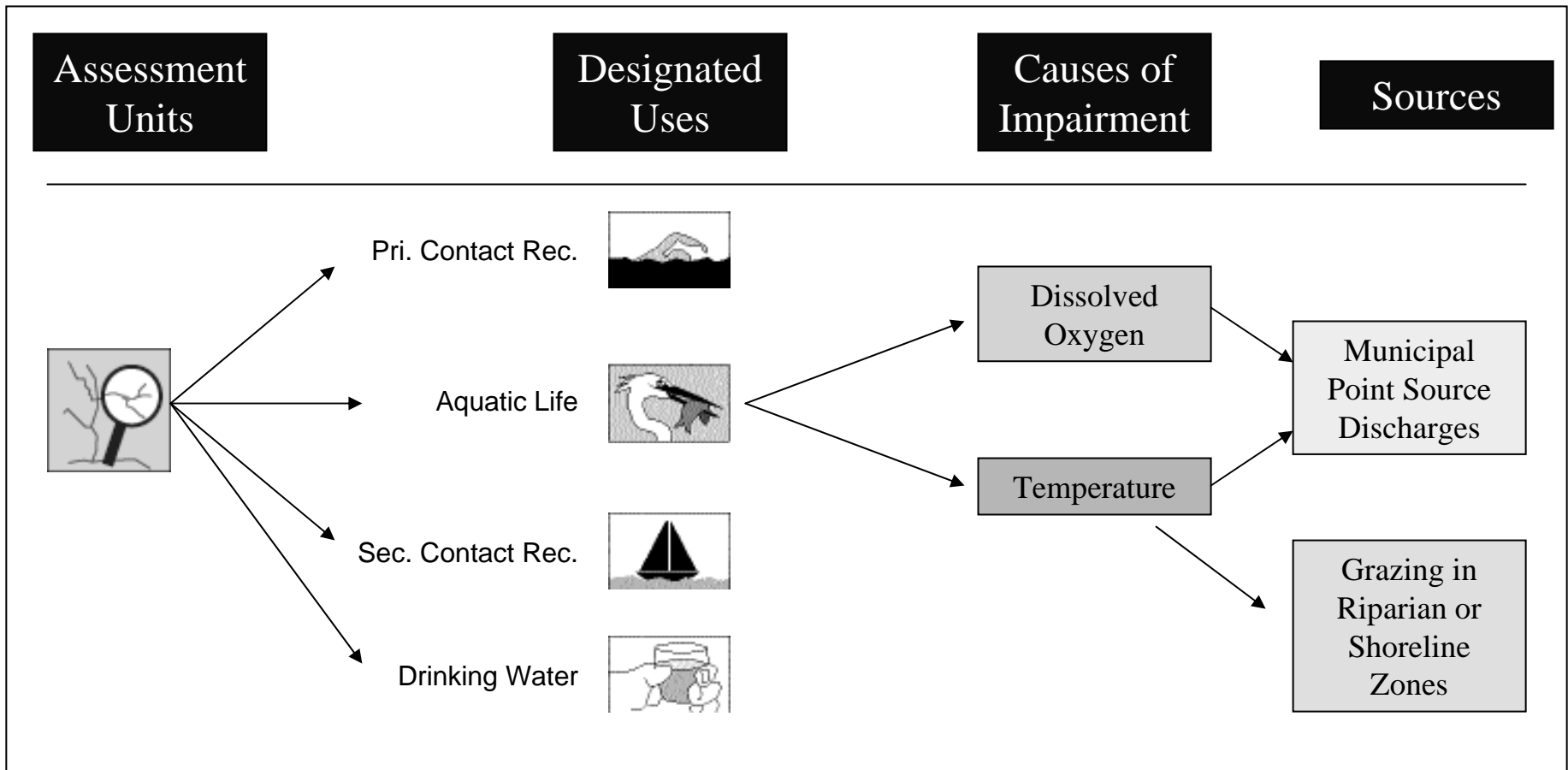
Pollution Sources – Based on those used in 319 NPS Program and OWM Permitting

The ADB provides a way to link approved TMDLs to Waterbody/Impairment combinations

The ADB Can Track Information on TMDL Establishment for Waterbodies

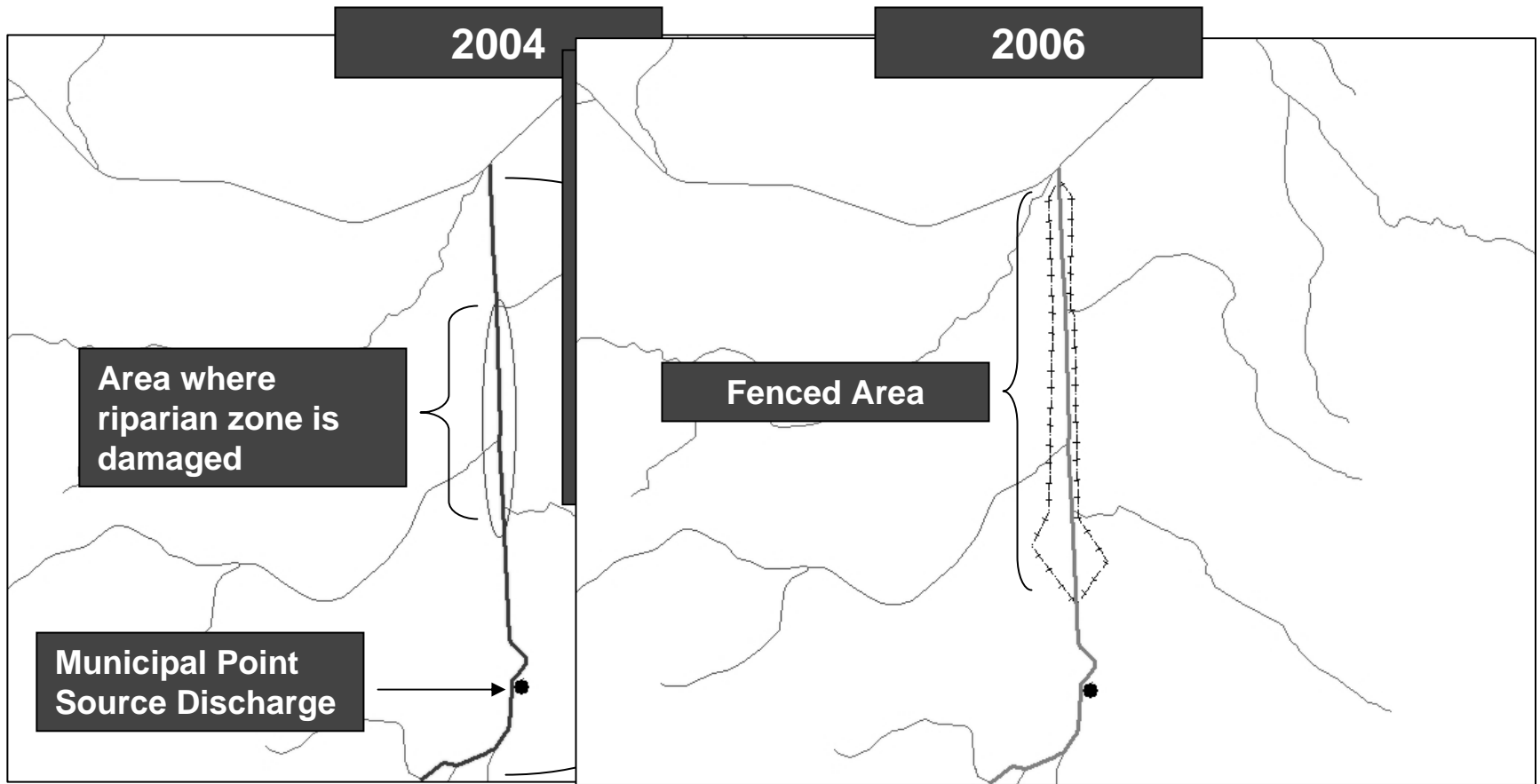# The ADB Can also track other control measures that would be enacted in order to achieve recovery of a waterbody
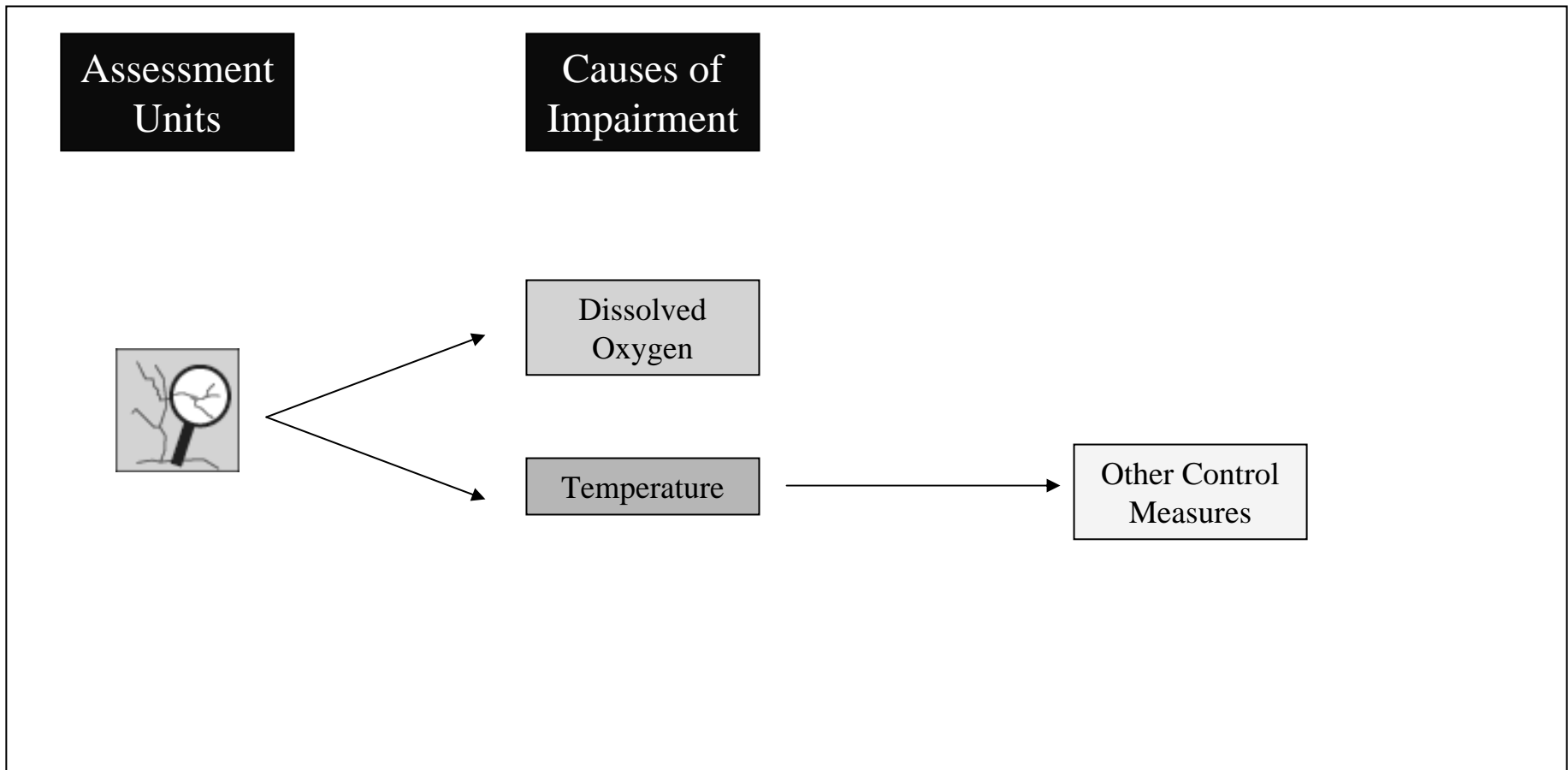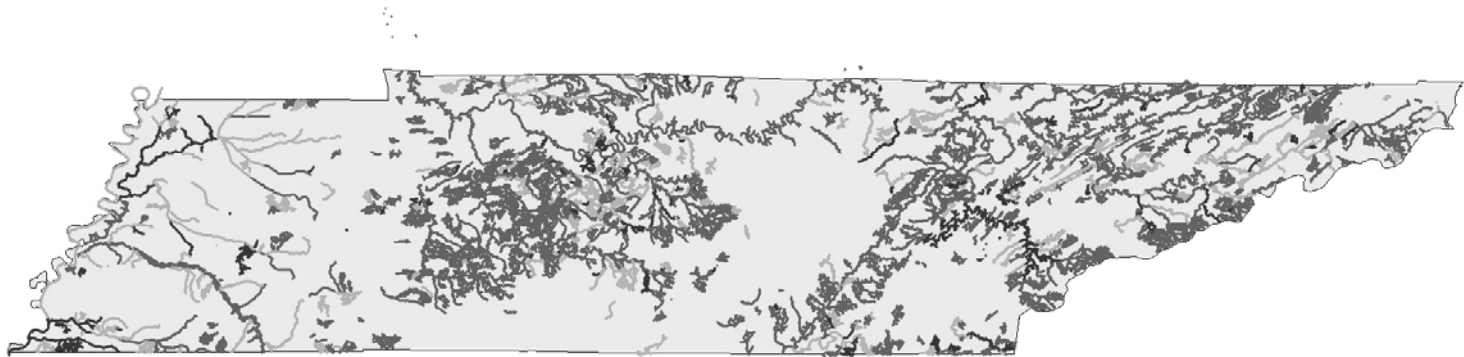
Example of Implementation Actions in the ADB

Implementation Actions

Assessment Unit	Name	Impairment	Expected to Attain Date
NHRIV600031004-10	Cain's Brook	Temperature, water	2006

 # Actions Associated with this Impairment: 1

Add Implementation Action   CLOSE

Since ADB can track data across cycles, it is possible to track the recovery of a waterbody

2004

2006

Area where riparian zone is damaged

Fenced Area

Municipal Point Source Discharge

The ADB structure can produce (and map) the Integrated Report's 5 part lists. . .
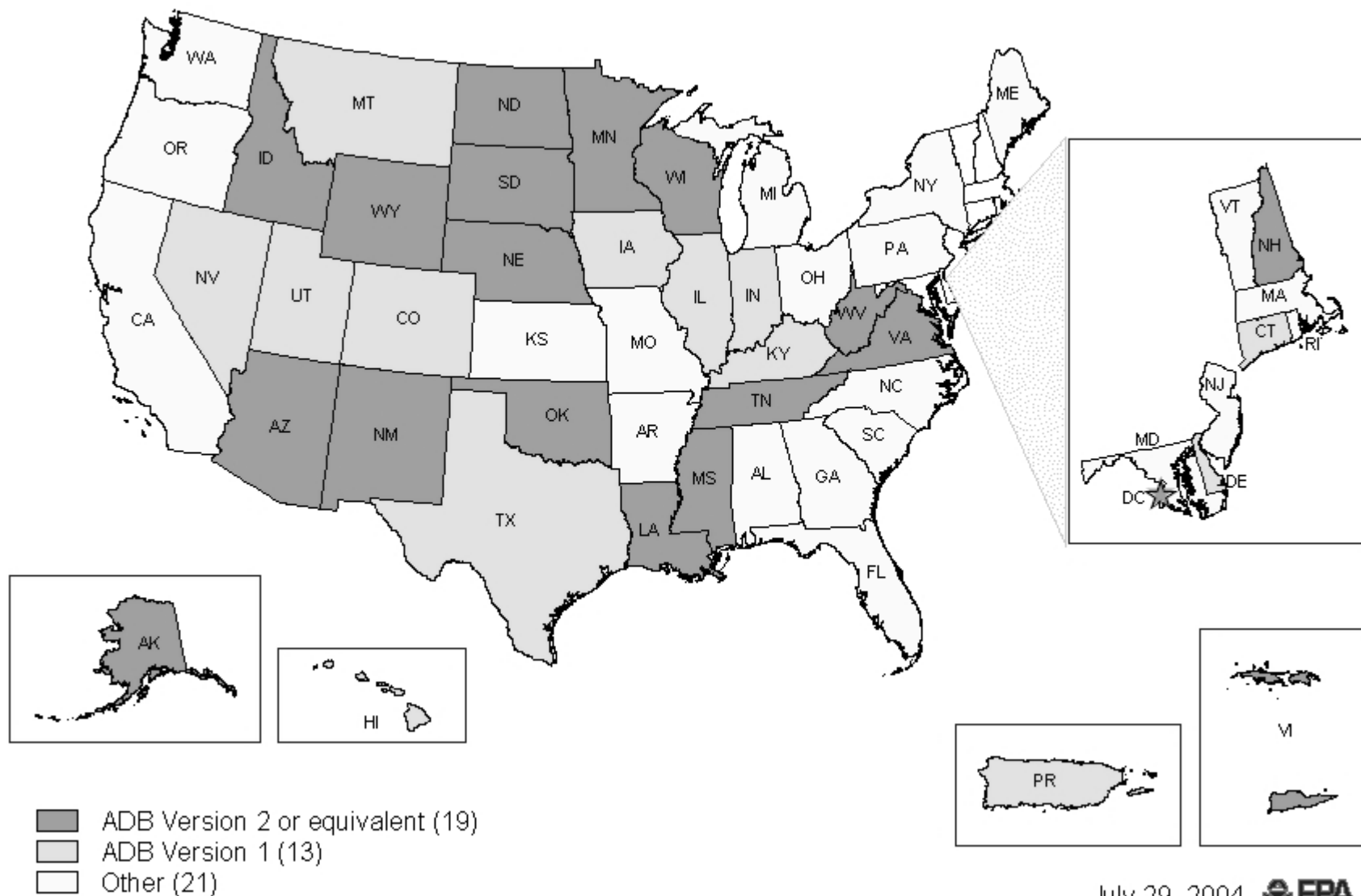

Integrated Reporting Categories

Category
— 1
— 2
— 5

The ADB allows many more questions to be answered using both reports and GIS maps.

Category Brea
(removing Fis

Recreation Use

Aquatic Life Use Support

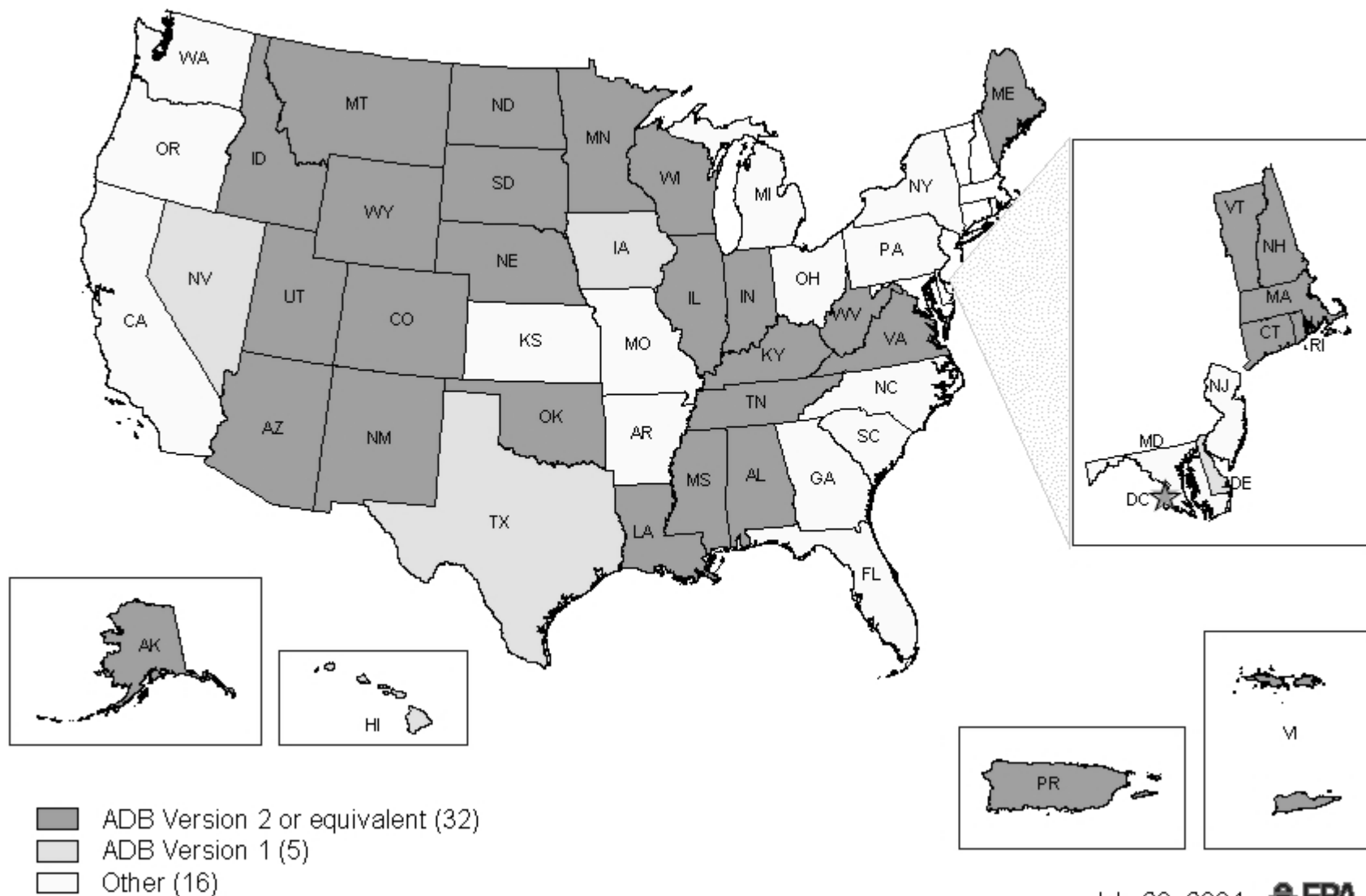**ATTAINMENT**

Fully Supporting

Not Supporting

Not Assessed

Conclusions and Issues

•Because of the ADB structure, and data that it stores, it is possible to answer virtually any questions you want.

•ADBv2 vs ADBv1 (what's the difference?)

•Segmentation Issues (tracking Assessment Units over time).

•Every 2 years, the National Assessment Database (NAD) is compiled from multiple data sources.

Projected Submittals for 2004

Legend:
- ADB Version 2 or equivalent (19)
- ADB Version 1 (13)
- Other (21)

July 29, 2004 EPA

Projected Submittals for 2006

Legend:
- ADB Version 2 or equivalent (32)
- ADB Version 1 (5)
- Other (16)

July 29, 2004 EPA